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FILE LAST UPDATED: 22 May 2007  (20070522/ED)

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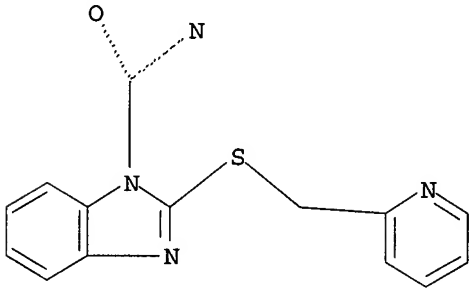


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L4   ANSWER 1 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2004:799468  CAPLUS
DOCUMENT NUMBER:          141:320050
TITLE:                    Controlled-release compositions containing proton pump
                          inhibitors
INVENTOR(S):              Nagahara, Naoki; Miyamoto, Keiko; Akiyama, Yohko
PATENT ASSIGNEE(S):       Takeda Chemical Industries, Ltd., Japan
SOURCE:                   PCT Int. Appl., 243 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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WO 2004082665 A1 20040930 WO 2004-JP3483 20040316
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2519208 A1 20040930 CA 2004-2519208 20040316
JP 2004300149 A 20041028 JP 2004-75037 20040316
EP 1607088 A1 20051221 EP 2004-720975 20040316
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
US 2006177509 A1 20060810 US 2005-549150 20050915
PRIORITY APPLN. INFO.: JP 2003-72858 A 20030317
WO 2004-JP3483 W 20040316

AB It is intended to provide a controlled release composition in which the release of its active ingredient (a proton pump inhibitor) is controlled in two or more steps with different release speeds. This composition, which comprises (1) a release-controlling part A capable of controlling the release speed of the active ingredient at a definite level, and (2) a release-controlling part B capable of controlling the release speed of the active ingredient at a definite level which is lower than the release speed in the release-controlling part A, optionally together with (3) a release-controlling part C capable of controlling the release speed of the active ingredient at a definite level which is higher than the release speed in the release-controlling part B, if necessary, is characterized in that the release of the active ingredient in the release-controlling part B is first made followed by the release of the active ingredient in the release-controlling part A (in the case of having the release-controlling part C, the release of the active ingredient in the release-controlling part C is first made followed by the release of the active ingredient in the release-controlling part B). Thus, a core tablet prepared from R-lansoprazole 113, lactose 303, corn starch 50, low-substituted hydroxypropyl cellulose (L-HPC) 35 mg was layered with an outer layer material coating R-lansoprazole 33.8, hydroxypropyl Me cellulose (Metolose 65SH-4000) 116.3 mg to obtain a controlled-release tablet.

IT 635751-21-2P 635751-22-3P 635751-23-4P
635751-24-5P 635751-25-6P 635751-26-7P
635751-27-8P 635751-28-9P 635751-29-0P
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635751-72-3P 635751-73-4P, Ethyl 2-[[[5-methoxy-2-[[(4-methoxy3,5-dimethyl-2-pyridyl)methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-75-6P, 2-[[[5-Methoxy-2-[[(4-methoxy3,5-dimethyl-2-pyridyl)methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-77-8P 635751-79-0P, Ethyl 2-[[[2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-80-3P,

2-[[[2-[[[4-(3-Methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-81-4P, 2-[[[5-(Difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl ethyl carbonate 635751-83-6P 635751-84-7P 635751-85-8P 635751-86-9P 635752-05-5P 635752-06-6P 635752-07-7P 635752-08-8P, 2-[[[2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 765942-20-9P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of proton pump inhibitors for controlled-release compns.)

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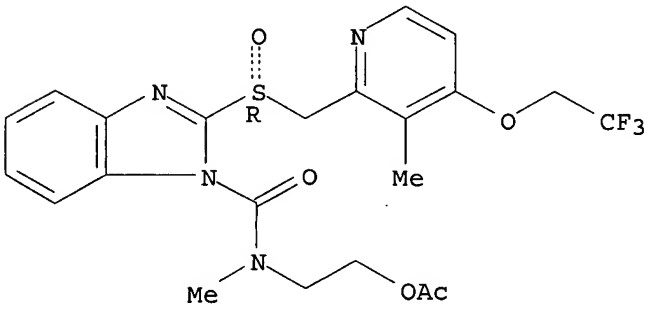
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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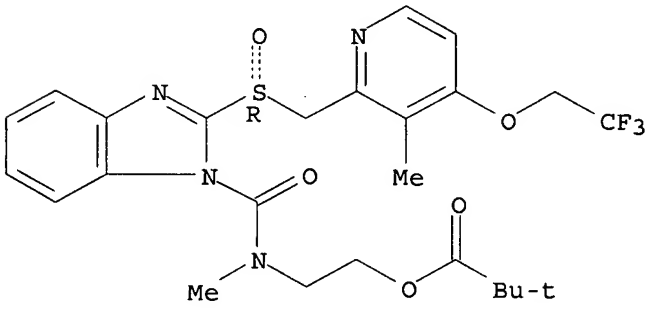
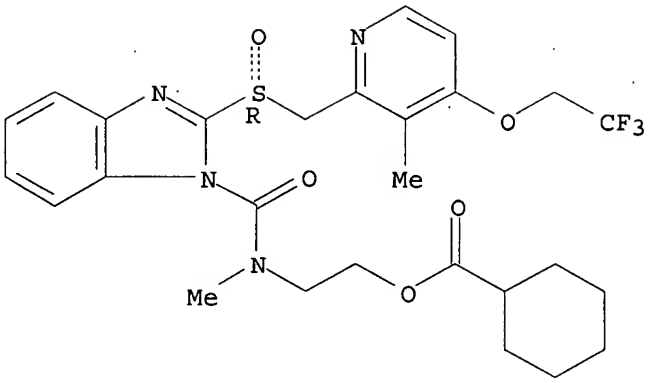
CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



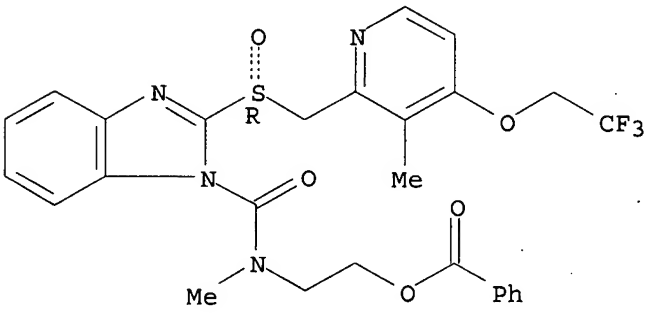
RN 635751-23-4 CAPLUS
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



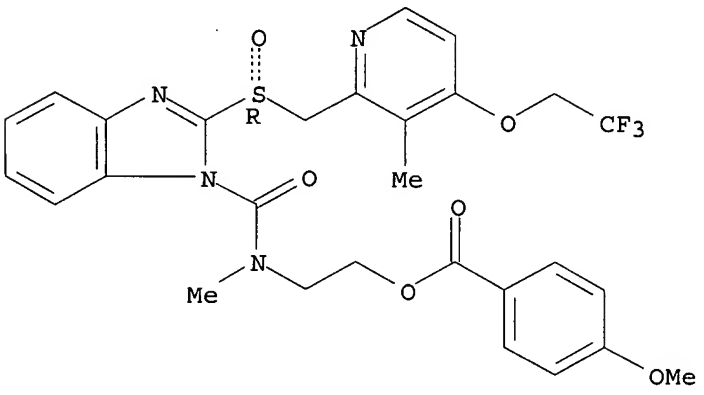
RN 635751-24-5 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

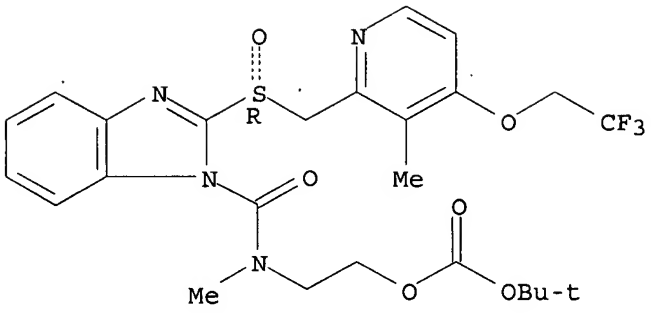


RN 635751-25-6 CAPLUS
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 635751-26-7 CAPLUS
CN Benzoic acid, 3-chloro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:780521 CAPLUS
DOCUMENT NUMBER: 141:282815
TITLE: Drug composition having active ingredient adhered at high concentration to spherical core
INVENTOR(S): Yoneyama, Shuji; Bando, Hiroto
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 237 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080439	A1	20040923	WO 2004-JP3075	20040310
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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JP 2004292442	A	20041021	JP 2004-66456	20040310
EP 1602362	A1	20051207	EP 2004-719076	20040310
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US 2006159760	A1	20060720	US 2005-548504	20050909
PRIORITY APPLN. INFO.:			JP 2003-66344 A	20030312
			WO 2004-JP3075 W	20040310

OTHER SOURCE(S): MARPAT 141:282815

AB Granule, fine particle or tablet of excellent leaching property, comprising a drug active ingredient in high content realized by forming a layer containing drug active ingredient on core particles through a combination of a method of dispersing and adhering an active ingredient while spraying or adding a binder with a method of spraying or adding a solution or suspension wherein an active ingredient and a binder are contained so as to effect adhesion. Further, there are provided a drug composition containing such a granule, fine particle or tablet and a process for

producing the same. Thus, original granules of crystalline cellulose were prepared by spraying a composition (R)-lansoprazole (I), crystalline cellulose, magnesium carbonate, and hydroxypropyl cellulose to crystalline cellulose. The obtained granules were further coated with a 1st coating material containing I, magnesium carbonate, sucrose, and hydroxypropyl cellulose, a 2nd coating material containing hydroxypropyl Me cellulose, talc, and titanium oxide, and then an enteric coating material containing methacrylic acid copolymer, talc, macrogol, titanium oxide, and polysorbate 80, or another enteric coating material containing different methacrylic acid copolymers, talc, and tri-Et citrate. The granules with different enteric coatings were mixed and filled in capsules.

IT 635751-21-2P 635751-22-3P 635751-23-4P
635751-24-5P 635751-25-6P 635751-26-7P
635751-27-8P 635751-28-9P 635751-29-0P
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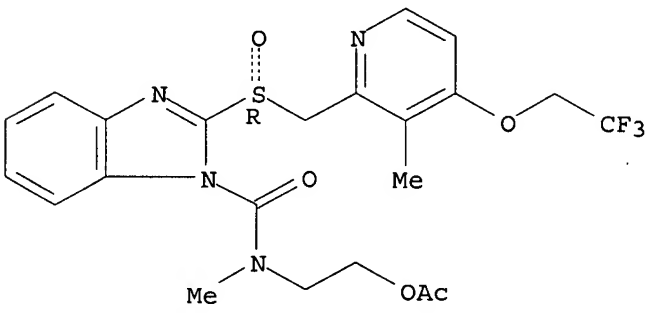
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of drug composition containing proton pump inhibitors adhered at high
concentration to spherical core)

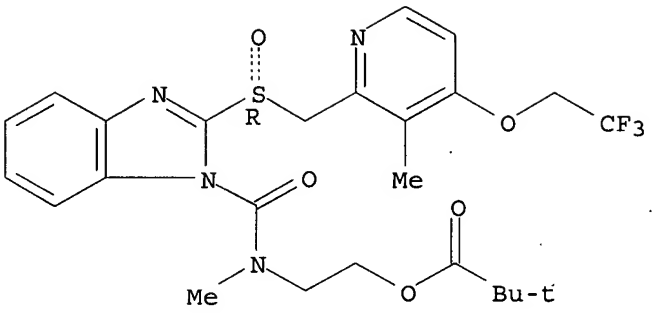
RN 635751-21-2 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



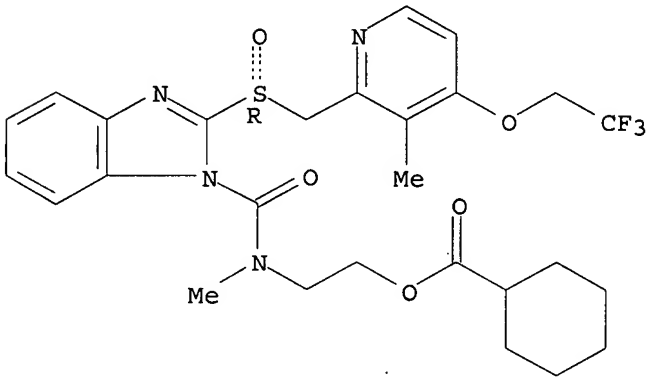
RN 635751-22-3 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



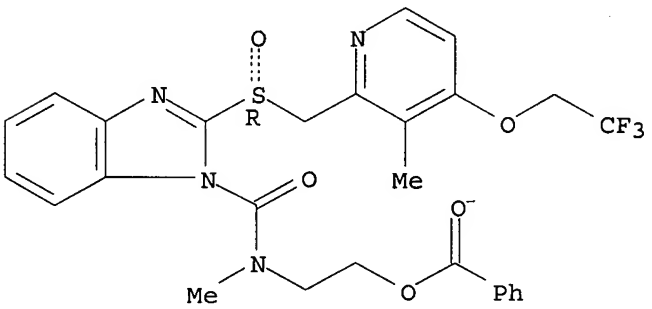
RN 635751-23-4 CAPLUS
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



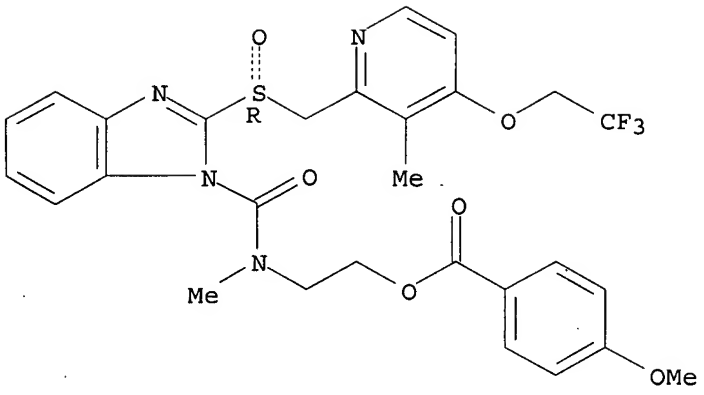
RN 635751-24-5 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



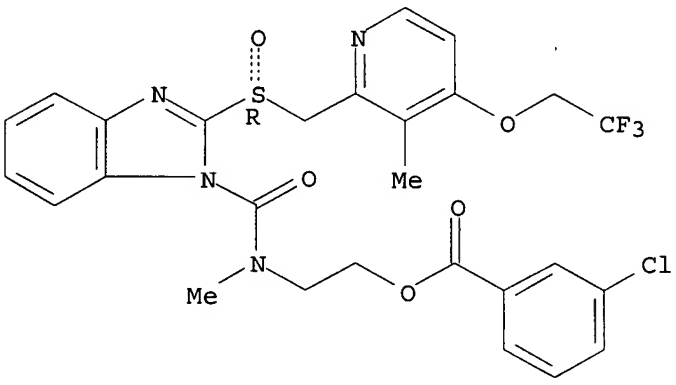
RN 635751-25-6 CAPLUS
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 635751-26-7 CAPLUS
CN Benzoic acid, 3-chloro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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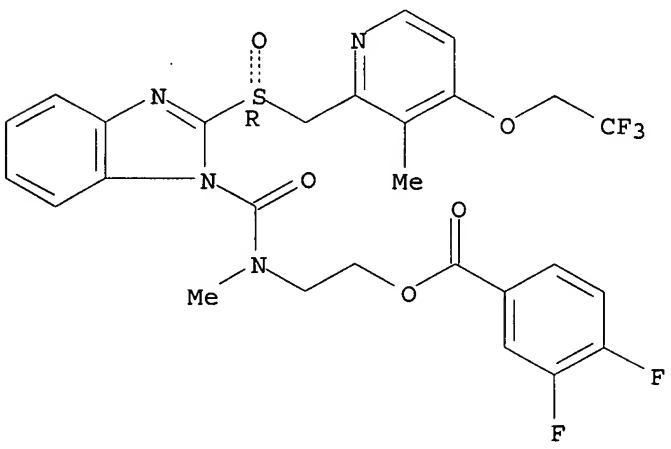
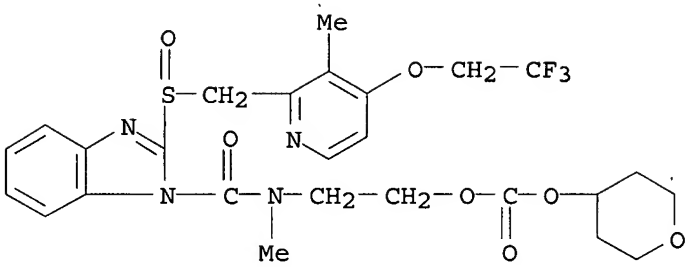
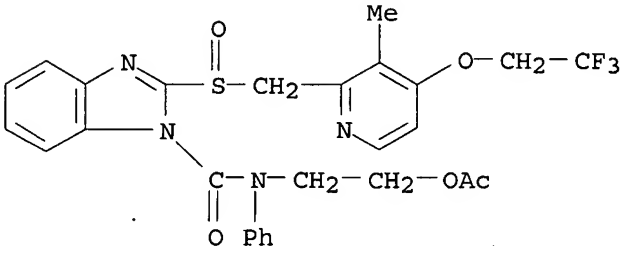
CN Benzoic acid, 3,4-difluoro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.





RN 635752-08-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-N-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:354765 CAPLUS
DOCUMENT NUMBER: 140:380603
TITLE: Controlled release preparation containing proton pump inhibitors
INVENTOR(S): Akiyama, Yohko; Kurasawa, Takashi; Bando, Hiroto; Nagahara, Naoki
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 371 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035020	A2	20040429	WO 2003-JP13155	20031015
WO 2004035020	A3	20040624		
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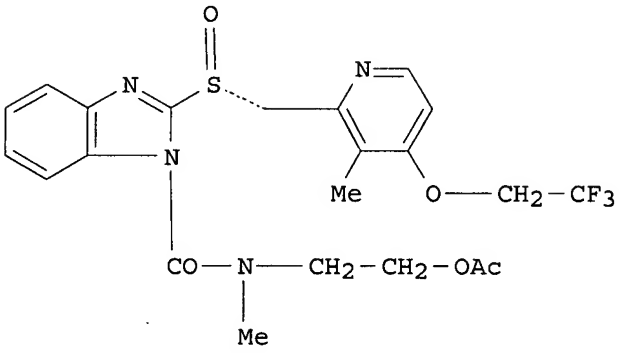
CN 1713897	A	20051228	CN 2003-80103935		20031015
IN 2005KN00604	A	20060616	IN 2005-KN604		20050408
US 2006013868	A1	20060119	US 2005-531069		20050411
NO 2005002400	A	20050513	NO 2005-2400		20050513
PRIORITY APPLN. INFO.:			JP 2002-301876	A	20021016
			JP 2003-66336	A	20030312
			WO 2003-JP13155	W	20031015

OTHER SOURCE(S): MARPAT 140:380603

GI



I

AB A controlled release preparation wherein the release of active ingredient is controlled, which releases an active ingredient for an extended period of time by staying or slowly migrating in the gastrointestinal tract, is provided by means such as capsulating a tablet, granule or fine granule wherein the release of active ingredient is controlled and a gel-forming polymer. Said tablet, granule or fine granule has a release-controlled coating-layer formed on a core particle containing an active ingredient. Many compds. such as I were prepared and formulations given, e.g., granules containing sucrose-starch spheres, R-lansoprazole, Mg carbonate, purified sucrose, corn starch, low-substituted hydroxypropyl cellulose, and hydroxpropyl cellulose.

IT 635751-21-2P 635751-22-3P 635751-23-4P
635751-24-5P 635751-25-6P 635751-26-7P
635751-27-8P 635751-28-9P 635751-29-0P
635751-30-3P 635751-31-4P 635751-32-5P
635751-33-6P 635751-34-7P 635751-35-8P
635751-36-9P 635751-37-0P 635751-38-1P
635751-39-2P 635751-40-5P 635751-41-6P
635751-42-7P 635751-43-8P 635751-45-0P
635751-46-1P 635751-47-2P 635751-49-4P
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635751-54-1P 635751-59-6P 635751-60-9P
635751-61-0P 635751-62-1P 635751-63-2P
635751-64-3P 635751-66-5P 635751-67-6P
635751-68-7P 635751-69-8P 635751-70-1P
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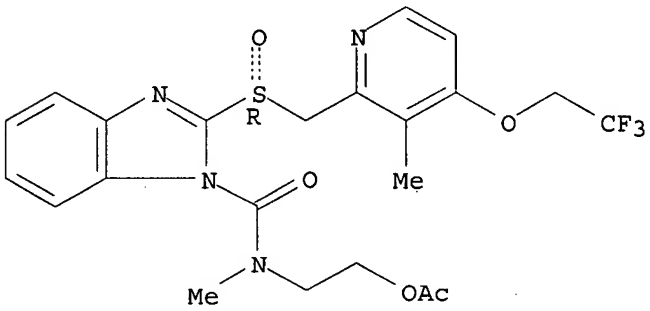
635751-75-6P 635751-77-8P 635751-79-0P
635751-80-3P 635751-81-4P 635751-83-6P
635751-84-7P 635751-85-8P 635751-86-9P
635752-05-5P 635752-06-6P 635752-07-7P
635752-08-8P
RL: SPN (Synthetic preparation); PREP (Preparation)

(controlled release preparation containing proton pump inhibitors)

RN 635751-21-2 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

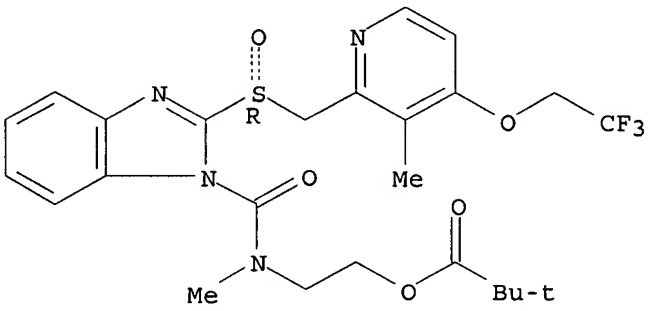
Absolute stereochemistry.



RN 635751-22-3 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

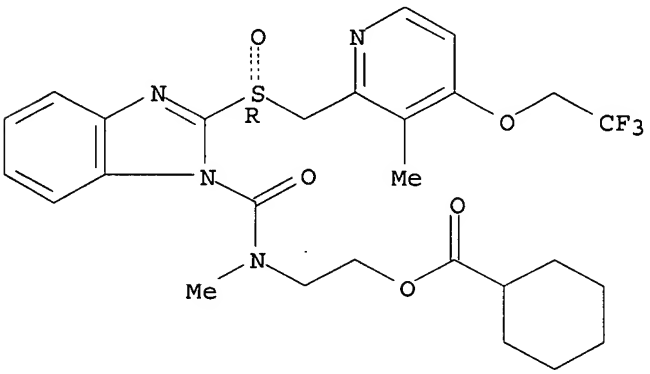
Absolute stereochemistry.



RN 635751-23-4 CAPLUS

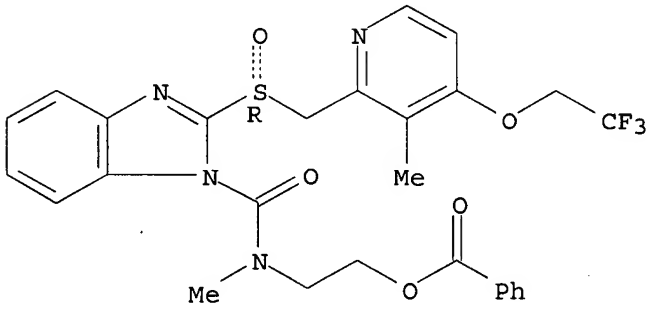
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



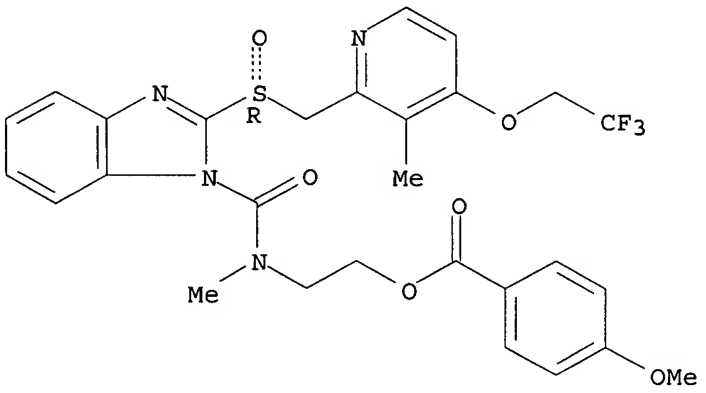
RN 635751-24-5 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



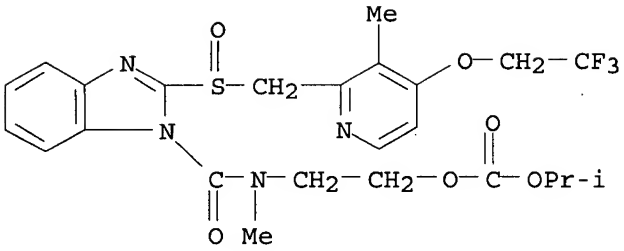
RN 635751-25-6 CAPLUS
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

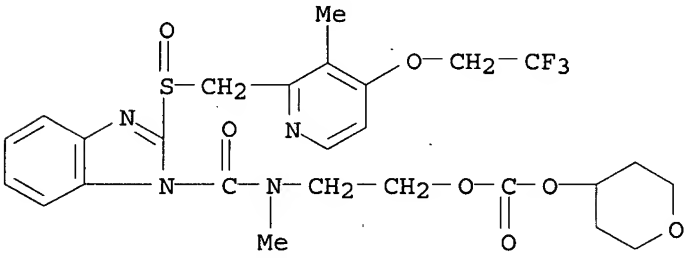


RN 635751-26-7 CAPLUS
CN Benzoic acid, 3-chloro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

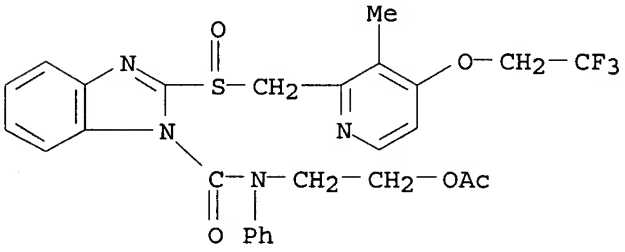
Absolute stereochemistry.



RN 635752-07-7 CAPLUS
CN Carbonic acid, 2-[methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)



RN 635752-08-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-N-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:1006959 CAPLUS
DOCUMENT NUMBER: 140:42180
TITLE: Preparation of nitrogenous heterocycle prodrugs having N-(2-acyloxyethyl)-N-methylcarbamoyl groups
INVENTOR(S): Kamiyama, Keiji; Banno, Hiroshi; Sato, Fumihiko; Hasuoka, Atsushi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2003106429	A1	20031224	WO 2003-JP7545		20030613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2489470	A1	20031224	CA 2003-2489470		20030613
AU 2003242388	A1	20031231	AU 2003-242388		20030613
JP 2004307457	A	20041104	JP 2003-169308		20030613
EP 1514870	A1	20050316	EP 2003-733425		20030613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1678315	A	20051005	CN 2003-818895		20030613
US 2006293371	A1	20061228	US 2005-517847		20050624
PRIORITY APPLN. INFO.:			JP 2002-175086	A	20020614
			JP 2003-41085	A	20030219
			WO 2003-JP7545	W	20030613

OTHER SOURCE(S): MARPAT 140:42180

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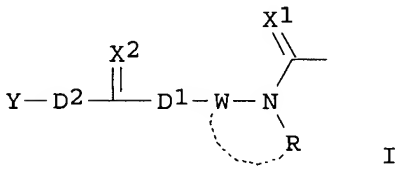


I

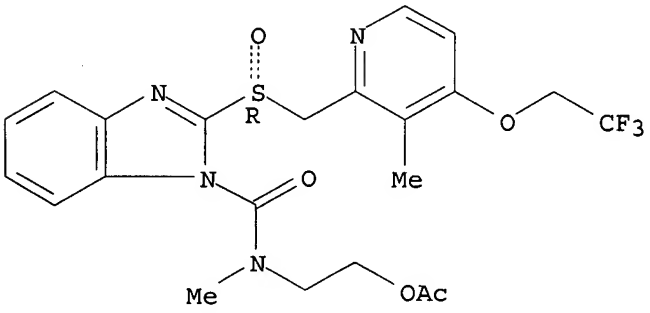
AB Disclosed is a compound having a group represented by the formula (I) [X1, X2 = O, S; W = (un)substituted bivalent hydrocarbon chain, -W1-Z-W2-; wherein W1, W2 = bivalent hydrocarbon chain, a bond; Z = (un)substituted bivalent hydrocarbon ring or heterocyclic ring, O, S, SO, SO2, (un)substituted NH; provided that when Z = O, S, SO, SO2, or (un)substituted NH, then W1, W2 = bivalent hydrocarbon chain; R = H, (un)substituted hydrocarbon group or heterocyclic ring; or R is not H, R may be linked to W; D1, D2 = a bond, O, S, (un)substituted NH; Y = (un)substituted hydrocarbyl or heterocyclyl] as a modifying group to be eliminated from a prodrug. It enables prodrug development based on the modification of a nitrogenous heterocycle, etc., with N-(2-acyloxyethyl)-N-methylcarbamoyl groups. For example, 3'-azido-3'-deoxythymidine (zidovudine), N-cyano-N'-methyl-N''-[2-((4-methyl-5-imidazolyl)-methylthio)ethyl]guanidine (cimetidine), (R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazole [(R)-(+)-lansoprazole], 2-[[(3,5-Dimethyl-4-methoxy-2-pyridyl)methyl]sulfinyl]-5-methoxy-1H-benzimidazole (omeprazole), 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]benzimidazole (rabeprazole), 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazole (pantoprazole), or 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-Imidazo[4,5-b]pyridine (tenatoprazole) were modified by one of CONMeCH2CH2OCO2Et, CONMeCH2CH2OAc, and CONMeCH2CH2OCO2-(tetrahydropyranyl-4-yl) groups.

IT 635751-21-2P 635751-33-6P 635751-36-9P

635751-53-0P 635751-66-5P 635751-77-8P
635751-78-9P 635751-79-0P 635751-81-4P
635751-82-5P 635752-07-7P 636565-79-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrogenous heterocycle prodrugs having N-(acyloxyethyl)-N-methylcarbamoyl groups)

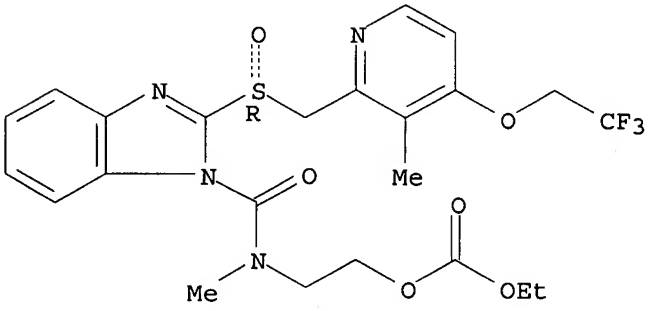
RN 635751-21-2 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



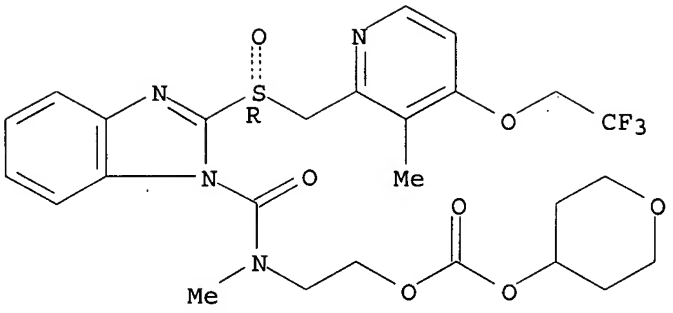
RN 635751-33-6 CAPLUS
CN Carbonic acid, ethyl 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

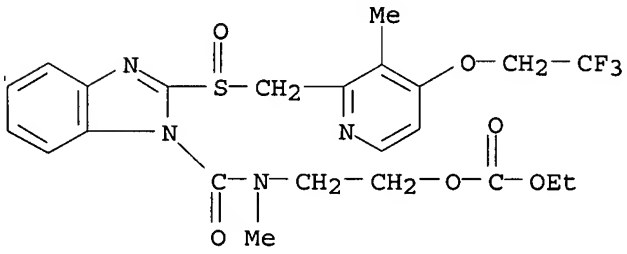


RN 635751-36-9 CAPLUS
CN Carbonic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

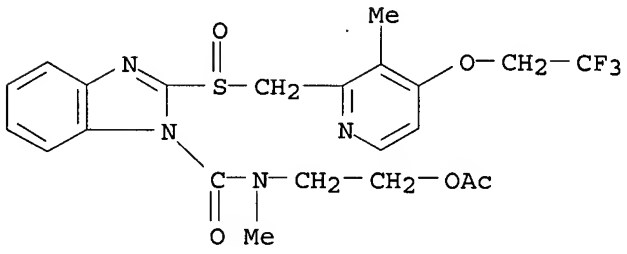
Absolute stereochemistry.



RN 635751-53-0 CAPLUS
CN Carbonic acid, ethyl 2-[methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

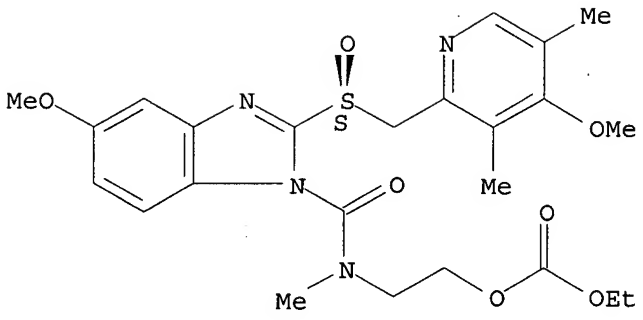


RN 635751-66-5 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



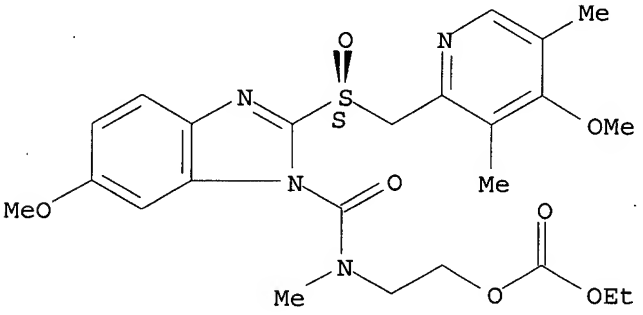
RN 635751-77-8 CAPLUS
CN Carbonic acid, ethyl 2-[[[5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

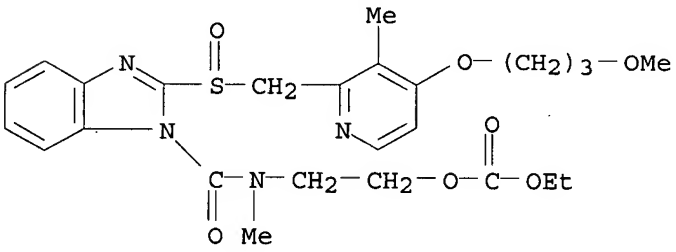


RN 635751-78-9 CAPLUS
CN Carbonic acid, ethyl 2-[[[6-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ester (9CI) (CA INDEX NAME)

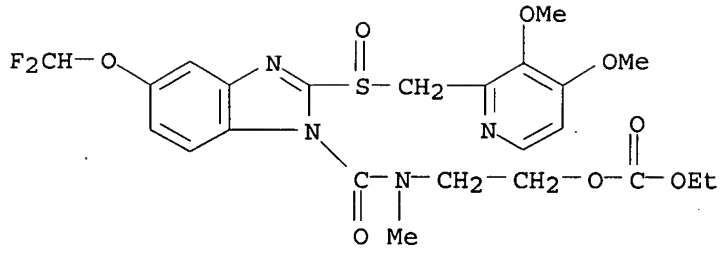
Absolute stereochemistry.



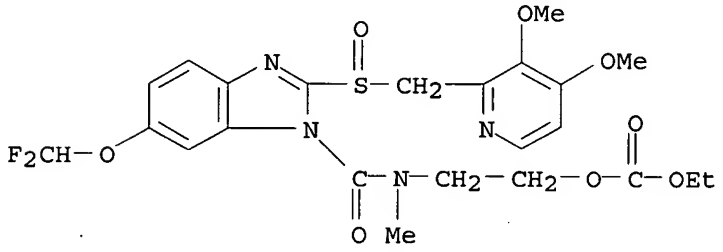
RN 635751-79-0 CAPLUS
CN Carbonic acid, ethyl 2-[[[2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ester (9CI) (CA INDEX NAME)



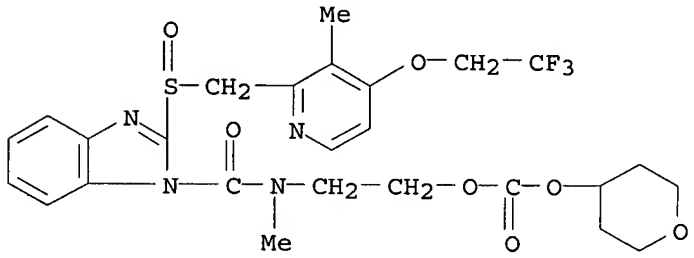
RN 635751-81-4 CAPLUS
CN Carbonic acid, 2-[[[5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ethyl ester (9CI) (CA INDEX NAME)



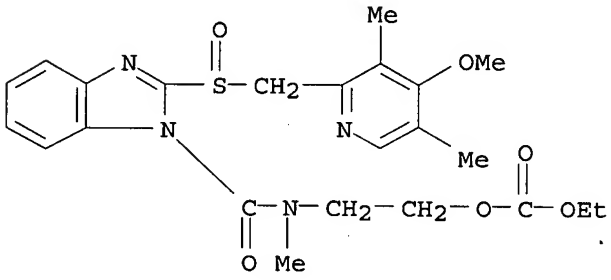
RN 635751-82-5 CAPLUS
CN Carbonic acid, 2-[[[6-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ethyl ester (9CI) (CA INDEX NAME)



RN 635752-07-7 CAPLUS
CN Carbonic acid, 2-[methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)



RN 636565-79-2 CAPLUS
CN Carbonic acid, ethyl 2-[[[2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:1006770 CAPLUS
DOCUMENT NUMBER: 140:42178
TITLE: Preparation of prodrugs of benzimidazoles and analogs as proton pump inhibitors for the treatment of peptic ulcers
INVENTOR(S): Kamiyama, Keiji; Banno, Hiroshi; Sato, Fumihiko
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 216 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003105845	A1	20031224	WO 2003-JP7546	20030613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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JP 2004307457	A	20041104	JP 2003-169308	20030613
EP 1513527	A1	20050316	EP 2003-733426	20030613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
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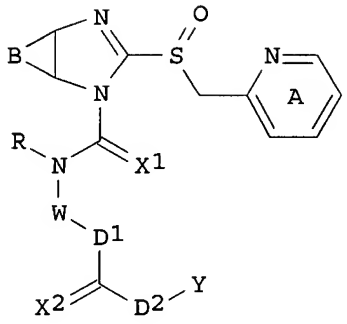
IN 2005KN00033	A	20060526	IN 2005-KN33	20050103
NO 2005000141	A	20050127	NO 2005-141	20050111
PRIORITY APPLN. INFO.:			JP 2002-175086 A	20020614
			JP 2003-41085 A	20030219
			WO 2003-JP7546 W	20030613

OTHER SOURCE(S): MARPAT 140:42178
GI



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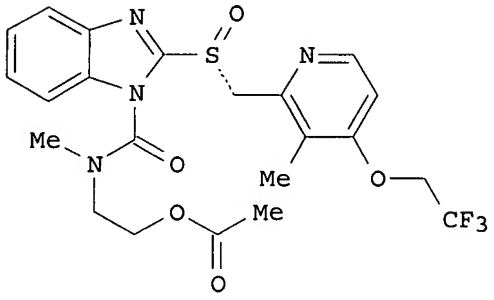


II

AB Title compds. I [wherein A = (un)substituted pyridine ring; B = (un)substituted benzene or monocyclic aromatic heterocycle; X1 and X2 = O or S; W = W1ZW2; W1 and W2 = independently divalent hydrocarbon chain or a bond; Z = (un)substituted divalent hydrocarbon ring, divalent heterocyclic ring, O, SO0-2, or NE; E = H, alkanoyl, (ar)alkoxycarbonyl, thiocarbamoyl, alkylsulfinyl, alkylsulfonyl, (alkyl)sulfamoyl, arylsulfamoyl, arylsulfinyl, arylsulfonyl, arylcarbonyl, or (un)substituted hydrocarbon, heterocyclyl, or carbamoyl; R = (un)substituted hydrocarbon or heterocyclyl; R and W may be bonded to each other; D1 and D2 = independently a bond, O, S, or NR1; R1 = H or (un)substituted hydrocarbon; Y = (un)substituted hydrocarbon or heterocyclyl; with provisos; and salts thereof] were prepared For example, reaction of bis(trichloromethyl)carbonate with 2-(methylamino)ethyl acetate•HCl in the presence of pyridine in THF, followed by coupling with (R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazole using a catalytic amount of 4-dimethylaminopyridine and TEA in THF, gave II. Compds. of the invention are proton pump inhibitor prodrugs, which show superior antiulcer activity, gastric acid secretion inhibitory action, mucosa-protecting action, and anti-Helicobacter pylori action (no data).

IT 635751-21-2P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-22-3P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl trimethylacetate 635751-23-4P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl cyclohexanecarboxylate 635751-24-5P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl benzoate 635751-25-6P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-methoxybenzoate 635751-26-7P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl

3-chlorobenzoate 635751-27-8P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3,4-difluorobenzoate 635751-28-9P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-trifluoromethoxybenzoate 635751-29-0P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-fluorobenzoate 635751-30-3P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3,4,5-trimethoxybenzoate 635751-31-4P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 2-pyridinecarboxylate 635751-32-5P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl methoxyacetate 635751-33-6P , Ethyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-34-7P, Isopropyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-35-8P, Benzyl 2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-36-9P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydropyran-4-yl carbonate 635751-37-0P, 2-Methoxyethyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-38-1P, 2-[N-Ethyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-39-2P, 2-[N-Isopropyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-40-5P, Ethyl 2-[N-isopropyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-41-6P, 2-[N-Cyclohexyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-42-7P, 2-[N-Cyclohexyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ethyl carbonate 635751-43-8P, 2-[[[(R)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-45-0P, tert-Butyl [2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]-3-pyridyl]methyl carbonate 635751-46-1P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]benzyl acetate 635751-47-2P 635751-49-4P 635751-50-7P, 2-[[[5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl benzoate 635751-52-9P, 3-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl benzoate 635751-53-0P, Ethyl 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-54-1P, Ethyl 2-[N-methyl[[(S)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-59-6P, 4-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]butyl acetate 635751-60-9P, Ethyl 4-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-

pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]butyl carbonate 635751-61-0P, Ethyl 3-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl carbonate 635751-62-1P, 3-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl acetate 635751-63-2P 635751-64-3P 635751-66-5P , 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-67-6P 635751-68-7P, 3-Methoxypropyl 2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-69-8P 635751-70-1P 635751-71-2P, Ethyl 2-[2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethoxy]ethyl carbonate 635751-72-3P, Ethyl 2-[N-methyl[[2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethoxy]carbonyl]amino]ethyl carbonate 635751-73-4P, Ethyl 2-[[[5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-75-6P, 2-[[[5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-77-8P, Ethyl 2-[[[(S)-5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-79-0P, Ethyl 2-[[[2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-80-3P, 2-[[[2-[[[4-(3-Methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-81-4P, 2-[[[5-(Difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl ethyl carbonate 635751-83-6P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 1-methylpiperidine-4-carboxylate 635751-84-7P 635751-85-8P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 1-methylpiperidin-4-yl carbonate 635751-86-9P 635752-05-5P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl benzoate 635752-06-6P, Isopropyl 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635752-07-7P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydropyran-4-yl carbonate 635752-08-8P, 2-[[[2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate

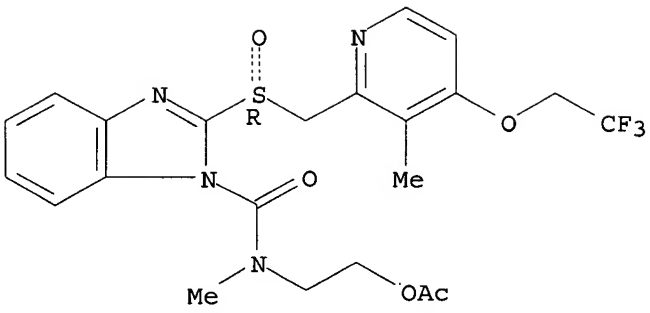
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antiulcer agent; preparation of prodrugs containing benzimidazoles and analogs as proton pump inhibitors for treatment of peptic ulcers)

RN 635751-21-2 CAPLUS

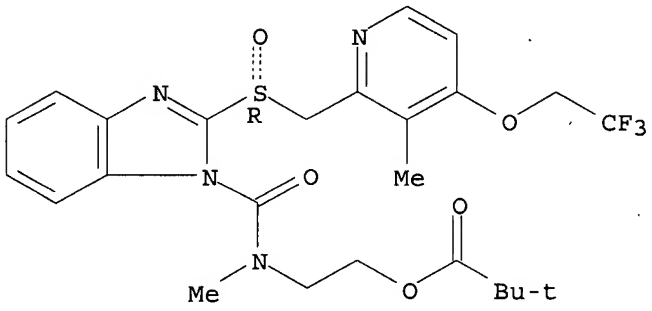
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



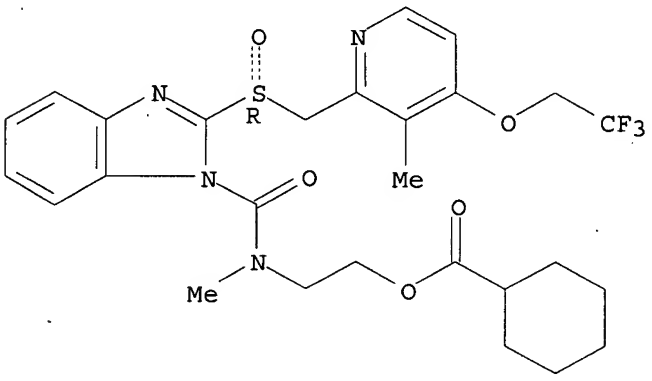
RN 635751-22-3 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



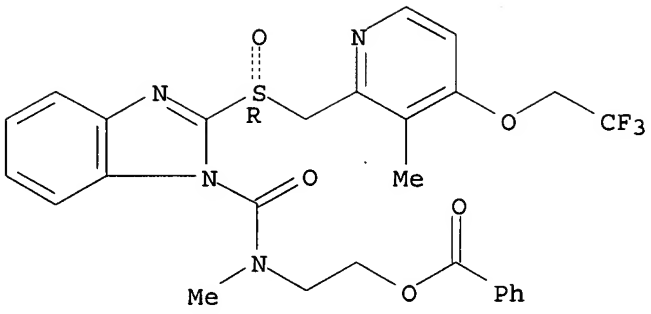
RN 635751-23-4 CAPLUS
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



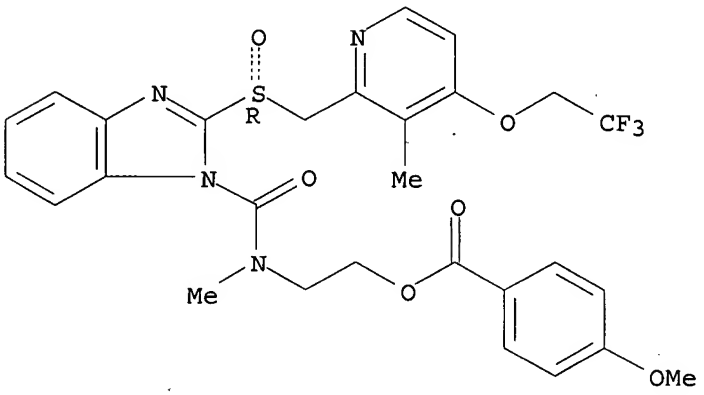
RN 635751-24-5 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



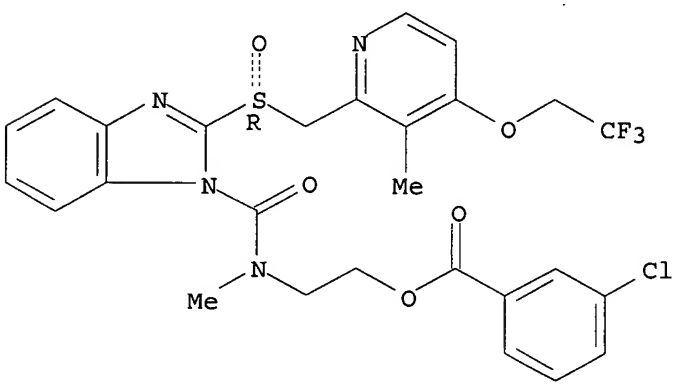
RN 635751-25-6 CAPLUS
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

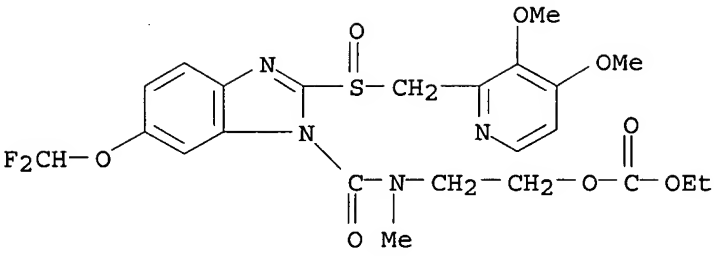


RN 635751-26-7 CAPLUS
CN Benzoic acid, 3-chloro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 635751-27-8 CAPLUS
CN Benzoic acid, 3,4-difluoro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

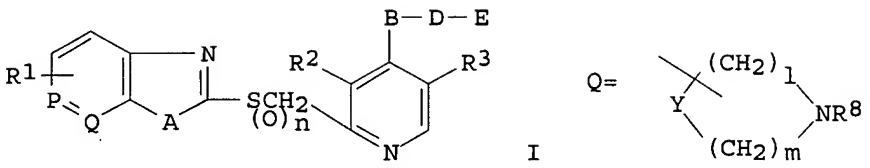


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:164175 CAPLUS
DOCUMENT NUMBER: 120:164175
TITLE: Preparation of pyridine compound and medicinal use thereof
INVENTOR(S): Kawakita, Takeshi; Yamaguchi, Yuko; Haga, Keiichiro; Ikeda, Yoshifumi
PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9324480	A1	19931209	WO 1993-JP732	19930531
W: CA, HU, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 644191	A1	19950322	EP 1993-910422	19930531
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5504082	A	19960402	US 1994-352183	19941201
US 5616581	A	19970401	US 1995-460666	19950602
PRIORITY APPLN. INFO.:			JP 1992-167017 A	19920601
			WO 1993-JP732 W	19930531
			JP 1993-272494 A	19931029
			US 1994-352183 A3	19941201

OTHER SOURCE(S): MARPAT 120:164175
GI



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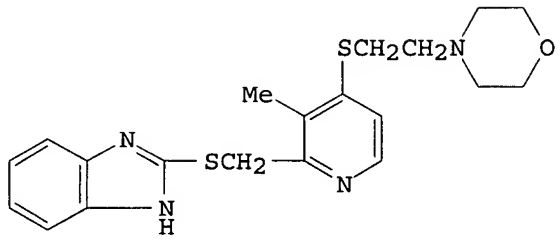


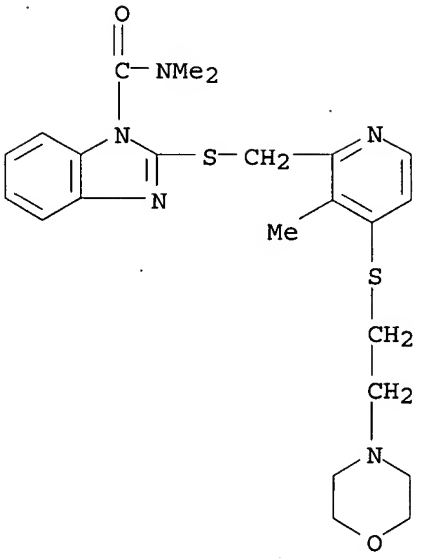
II

AB (Benzazolylthiomethyl)pyridine derivs. [I; R1 = H, halo, alkyl, alkoxy, HO, alkoxycarbonyl, CO2H, haloalkyl, NO2, NH2, mono- or dialkylamino, alkoxycarbonylalkylamino, carboxyalkylamino; R2, R3 = H, halo, alkyl; P:Q = CH:CH, N:CH, CH:N; A = O, S, or NR4 (wherein R4 = H, alkyl, etc.); n = 0, 1 or 2; B = O, S(O)p (where p = 0, 1 or 2), or NR5 (wherein R5 = H, or alkyl); D = a single bond, (un)substituted alkylene, oxoalkylene; E = alkoxyalkyl, NR6R7 (wherein R6, R7 = H, alkyl, cycloalkyl, acyl, alkoxycarbonyl, CONH2, etc.), Q1 (wherein R8 = H, alkyl, acyl, carboxyalkyl, phenylalkyl, etc.; Y = CH2, O, S; l, m = 0, 1-3)] or a pharmaceutical acceptable salt thereof are prepared I have the antibacterial effect against Helicobacter pylori, antiulcer effect, and the effects of protecting gastrointestinal cells and inhibiting the recrudescence and recurrence of ulcer. Thus, chlorination of 2-hydroxymethyl-3-methyl-4-(2-morpholinoethylthio)pyridine by SOCl2 and condensation of the resulting 2-chloromethyl derivative with 2-mercaptobenzimidazole in aqueous NaOH and EtOH gave a (benzimidazolylthiomethyl)pyridine derivative (II). II in vitro showed min. inhibitory concentration of ≤0.006 μg/mL against H. pylori and in vivo at 30 mg/kg p.o. inhibited 55% the 0.3N HCl-containing aspirin-induced stomach ulcer in rats.

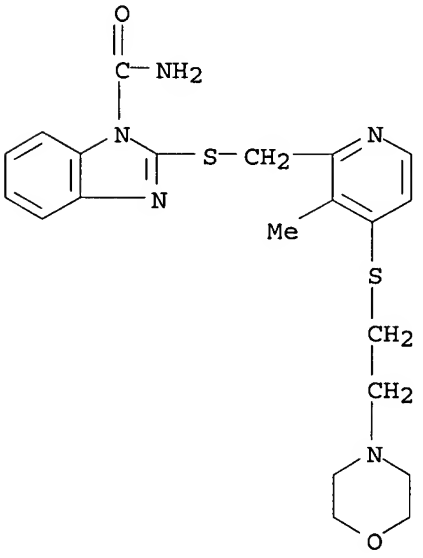
IT 153284-60-7P 153284-62-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as ulcer inhibitor and antibacterial agent against Helicobacter pylori)

RN 153284-60-7 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N,N-dimethyl-2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)



RN 153284-62-9 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:630546 CAPLUS
DOCUMENT NUMBER: 101:230546
TITLE: Benzimidazole derivatives and their use
INVENTOR(S): Braendstroem, Arne Elof; Carlsson, Stig Aake Ingemar; Kaellsson, Britt Inger Monica; Lindberg, Per Lennart
PATENT ASSIGNEE(S): Aktiebolag Haessle, Swed.
SOURCE: Ger. Offen., 109 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

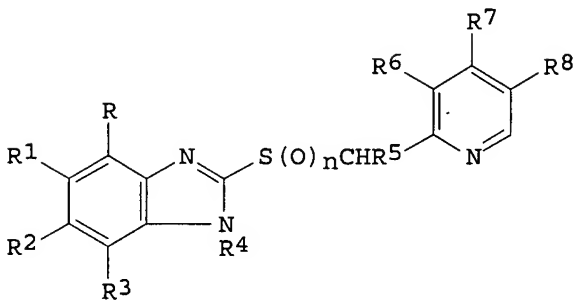
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3404610	A1	19840816	DE 1984-3404610	19840209
SE 8400688	A	19840812	SE 1984-688	19840209
BE 898880	A1	19840810	BE 1984-212366	19840210
DK 8400591	A	19840812	DK 1984-591	19840210
FI 8400547	A	19840812	FI 1984-547	19840210
NO 8400504	A	19840813	NO 1984-504	19840210
GB 2134523	A	19840815	GB 1984-3540	19840210
GB 2134523	B	19870812		
AU 8424456	A	19840816	AU 1984-24456	19840210
AU 578891	B2	19881110		
NL 8400446	A	19840903	NL 1984-446	19840210
ZA 8401011	A	19840926	ZA 1984-1011	19840210
FR 2543551	A1	19841005	FR 1984-2093	19840210
FR 2543551	B1	19870821		
JP 59181277	A	19841015	JP 1984-22067	19840210
AT 8400435	A	19880315	AT 1984-435	19840210
AT 386825	B	19881025		
CH 666892	A5	19880831	CH 1984-660	19840210
GB 2174988	A	19861119	GB 1986-10790	19860502
GB 2174988	B	19870826		
SE 8700498	A	19870210	SE 1987-498	19870210
SE 8700499	A	19870210	SE 1987-499	19870210
NO 8802001	A	19840813	NO 1988-2001	19880506
US 5039806	A	19910813	US 1989-408719	19890918

PRIORITY APPLN. INFO.:

SE 1983-736	A	19830211
US 1984-578418	B1	19840209
GB 1984-3540	A3	19840210
NO 1984-504	A1	19840210
US 1986-884863	B2	19860716
US 1987-21992	B1	19870305
US 1988-266330	B1	19881101
US 1989-379703	B3	19890712

OTHER SOURCE(S): MARPAT 101:230546

GI



I

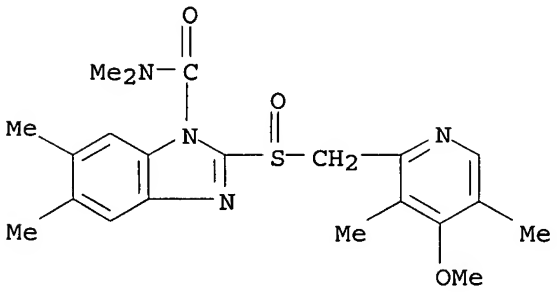
AB Pyridinylmethylthio(or sulfinyl)benzimidazoles I [R - R3 = H, halo, cyano, F3C, NO2, CHO, modified CHO, alkyl, alkoxy, acyl, acyloxy, aryl, aryloxy, alkylthio, alkylsulfinyl; R4 = H, alkenyloxy, alkynyloxy, oxacycloalkyl, (un)substituted alkyl, alkoxy; n = 0,1] and their carbocyclic and heterocyclic fused-ring derivs. were prepared Thus, 4-(allyloxy)-2,3,5-trimethylpyridine N-oxide was rearranged by heating in Ac2O to give 4-(allyloxy)-3,5-dimethyl-2-pyridinemethanol. This was converted to the 2-(chloromethyl) derivative by SOCl2 and condensed with 4,5,6,7-tetramethyl-1H-benzimidazole-2-thiol to give I (R - R3 = R6 = R8 = Me, R4 = R5 = H, R7 =

H2C:CHCH2O). I are effective in vitro inhibitors of secretion by rabbit gastric mucosa with -log molar IC50 4.5-6.7.

IT 92894-17-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and stomach antisecretory activity of)

RN 92894-17-2 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, 2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-N,N,5,6-tetramethyl- (9CI) (CA INDEX NAME)

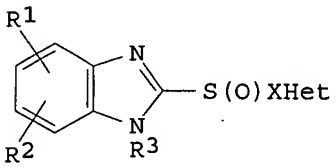


L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:205422 CAPLUS
DOCUMENT NUMBER: 96:205422
TITLE: Pharmaceutical use of benzimidazoles
INVENTOR(S): Ruwart, Mary Jean
PATENT ASSIGNEE(S): Upjohn Co. , USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 45200	A1	19820203	EP 1981-303416	19810724
EP 45200	B1	19880302		
R: BE, CH, DE, FR, GB, IT, NL, SE				
US 4359465	A	19821116	US 1980-173233	19800728
JP 57053406	A	19820330	JP 1981-118378	19810728
JP 01060008	B	19891220		

PRIORITY APPLN. INFO.: US 1980-173233 A 19800728
OTHER SOURCE(S): MARPAT 96:205422
GI



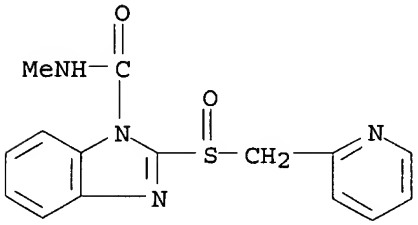
I

AB Oral pharmaceutical compns. for prevention or treatment of nongastric acid-induced, nontraumatically-induced, nonneoplastic gastrointestinal inflammatory disease in a mammal comprise the title compds. I [R1 and R2 = H, C1-4 alkyl, halogen, CN, CO2H, etc.; R3 = H, C1-4 alkyl, alkylcarbonyl, CONH2, etc.; X = alkylene, Het = heterocyclic, or XHet taken together =

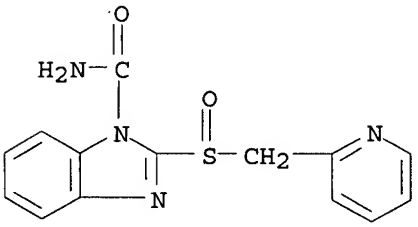
R4R5R6C6H2CHR7 (R4, R5, and R6 = H, Me, MeO, EtO, etc.; R7 = H, Me, or Et] and their salts. The ED50 for inhibition of gastric acid secretion in rats fasted with restraint for 36 h by timoprazole (I, R1, R2, R3 = H, X = CH2, Het = 2-pyridyl)(II) [57237-97-5] in a vehicle containing Emulphor 10, EtOH 10, and H2O 80% was 12 mg/mL. A batch of 10,000 tablets each containing 10 mg II were prepared

IT 60524-95-0 60536-43-8
RL: BIOL (Biological study)
(gastrointestinal inflammation inhibitor)

RN 60524-95-0 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:41943 CAPLUS
DOCUMENT NUMBER: 92:41943
TITLE: Benzimidazole derivatives, their salts, and optical isomers
PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.
SOURCE: Austrian, 9 pp. Division of Austrian 337,697.
CODEN: AUXXAK
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AT 351524	B	19790725	AT 1976-7522	19761011
AT 7607522	A	19790115		
AT 337697	B	19770711	AT 1975-8380	19751104
AT 7508380	A	19761115		

PRIORITY APPLN. INFO.: AT 1975-8380 A 19751104
US 1975-630916 A 19751111

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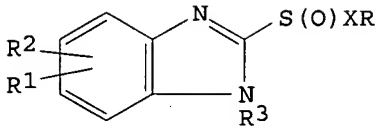


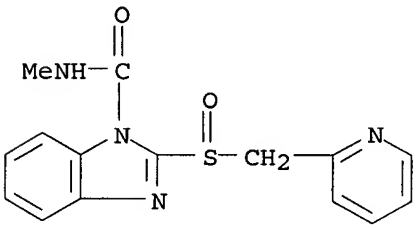
I

AB The benzimidazoles I (R = heterocyclyl, e.g. 2-pyridyl; R1, R2 = H, alkyl, halo, CN, CO2, OH, carboxyallyl, carbamoyl, hydroxyallyl, carboalkoxy, carboalkoxyallyl, carbamoyl, carbamoylalkyl, alkoxy, hydroxyalkyl, F3C, acyl; R3 = H, alkyl, acyl, carboalkoxy, acylmethyl, alkoxycarbonylmethyl, alkylsulfonyl; X = alkylene) were prepared Thus, 2-(methylsulfinyl)benzimidazole Li salt was treated with 2-chloropyridine to give 2-(2-pyridylmethylsulfinyl)benzimidazole (II). At 10 mg/kg II inhibited stomach gastric acid secretion.

IT 60524-95-0P 60536-43-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

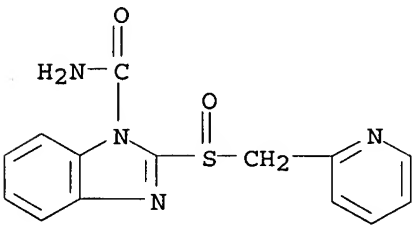
RN 60524-95-0 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:593309 CAPLUS

DOCUMENT NUMBER: 91:193309

TITLE: Benzimidazole derivatives

INVENTOR(S): Berntsson, Peder Bernhard; Carlsson, Stig Ake Ingemar; Garberg, Lars Erik; Junggren, Ulf Krister; Sjoestrand, Sven Erik; Von Wittken Sundell, Gunhild Wika

PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.

SOURCE: Fr. Demande, 21 pp. Division of Fr. Demande 2,331,340. CODEN: FRXXBL

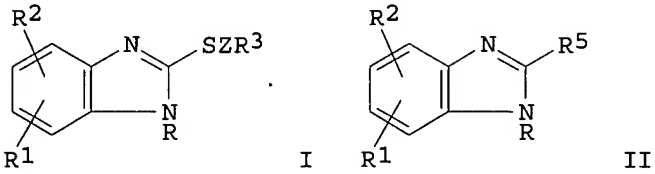
DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
FR 2392021	A1	19781222	FR 1976-16732		19760603
FR 2392021	B1	19790817			
FI 7502327	A	19770216	FI 1975-2327		19750815
FI 63756	B	19830429			
FI 63756	C	19830810			
CS 196289	B2	19800331	CS 1975-7458		19751105
CH 623582	A5	19810615	CH 1979-9760		19791031
PRIORITY APPLN. INFO.:			CH 1975-14814	A	19751114
			FR 1976-16732		19760603

OTHER SOURCE(S): CASREACT 91:193309; MARPAT 91:193309
GI

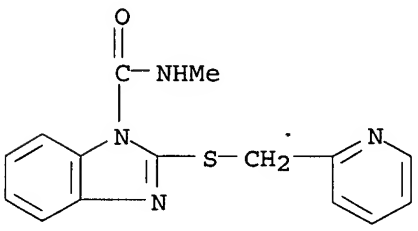


I II

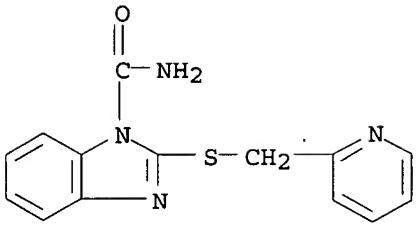
AB 2-[(Heteroarylalkyl)thio]benzimidazoles I [R = alkyl, CONH2, alkyl- or dialkylcarbamoyl, R4COCH2 (R4 = alkyl), alkoxycarbonylmethyl, alkylsulfonyl; R1 and R2 (same or different) = H, alkyl, halo, cyano, CO2H, carboxyalkyl, carbalkoxy, carbalkoxyalkyl, carbamoyl, carbamoylalkyl, OH, alkoxy, hydroxyalkyl, CF3, acyl; Z = linear or branched alkylene; R3 = (un)substituted quinolyl of pyridyl] were prepared from the resp. II (R5 = SH, reactive acyloxy) and the resp. R6ZR3 (R6 = reactive acyloxy, SH) and also by the reaction of o-phenylenediamines with the resp. R3ZSCO2H. I were converted to the resp. sulfoxides which inhibited gastric secretion. A mixture of 2-mercaptobenzimidazole, 2-(chloromethyl)pyridine hydrochloride, aqueous NaOH, and EtOH was refluxed 2 h to give I (R = R1 = R2 = H, Z = CH2, R3 = 2-pyridyl), which was oxidized by 3-ClC6H4C(O)OOH to yield the resp. sulfoxide.

IT 60525-10-2P 64948-75-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and S-oxidation of)

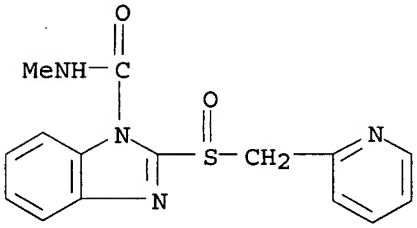
RN 60525-10-2 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



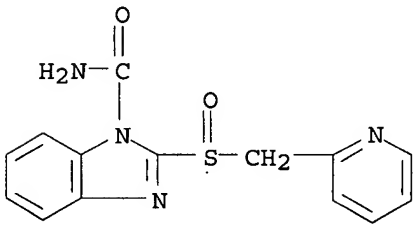
RN 64948-75-0 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



IT 60524-95-0P 60536-43-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 60524-95-0 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]-
(9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI)
(CA INDEX NAME)



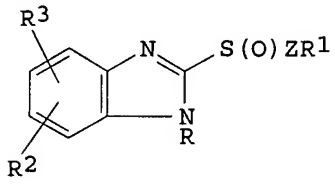
L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:557736 CAPLUS
DOCUMENT NUMBER: 91:157736
TITLE: 2-(2-Heterocyclic-methylsulfinyl)benzimidazole compounds
INVENTOR(S): Berntsson, Peder B.; Carlsson, Stig A. I.; Garberg, Lars E.; Junggren, Ulf K.; Sjoestrand, Sven E.; Von Wittken Sundeil, Gunhild W.
PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.
SOURCE: Can., 24 pp.
CODEN: CAXXA4
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

CA 1055033	A1	19790522	CA 1975-239643		19751114
SE 416649	B	19810126	SE 1974-6513		19740516
SE 416649	C	19810507			
CH 623814	A5	19810630	CH 1975-14814		19751114
PRIORITY APPLN. INFO.:			SE 1974-6513	A	19740516
			CA 1975-239643	A	19751114

OTHER SOURCE(S): CASREACT 91:157736

GI



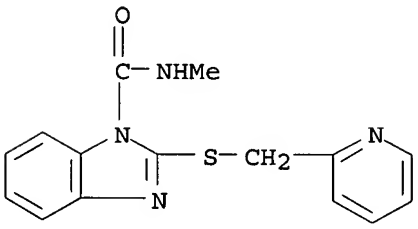
I

AB Benzimidazolyl sulfoxides I [R = H, alkyl, carbalkoxy, CONH2, alkylcarbamoyl, alkylsulfonyl; Z = C1-4 linear or branched alkylene; R1 = 2-pyridyl, alkyl-2-pyridyl, halo-2-pyridyl; R2 and R3 (same or different) are H, alkyl, halo, carbalkoxy, alkoxy, acyl], which inhibited gastric acid secretion, were prepared by six different methods. The reaction of 2-(2-pyridylmethylthio)benzimidazole (II) with 3-ClC6H4C(O)OOH in CHCl3 gave I (R = R2 = R3 = H, Z = CH2, R1 = 2-pyridyl). (2-Pyridylmethylthio)formic acid was heated with o-phenylenediamine in 4N HCl to yield II.

IT 60525-10-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and S-oxidation of)

RN 60525-10-2 CAPLUS

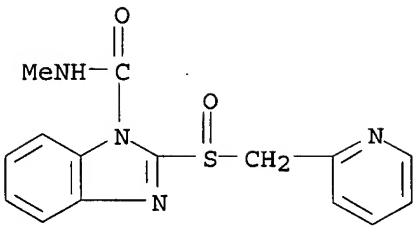
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



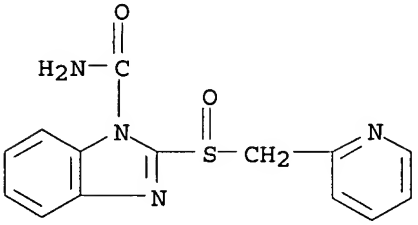
IT 60524-95-0P 60536-43-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 60524-95-0 CAPLUS

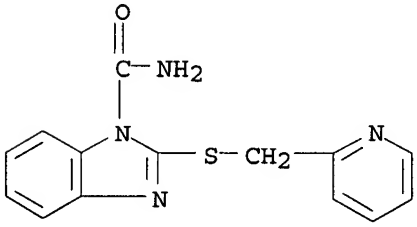
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



IT 64948-75-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(S-oxidation of)
RN 64948-75-0 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:105333 CAPLUS
DOCUMENT NUMBER: 88:105333
TITLE: Benzimidazole derivatives and their effects on stomach acid secretion
PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.
SOURCE: Neth. Appl., 28 pp.
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 7513141	A	19770512	NL 1975-13141	19751110
US 4045563	A	19770830	US 1975-630916	19751111
PRIORITY APPLN. INFO.:			US 1975-630916 A	19751111

SE 1974-6513 A 19740516

GI

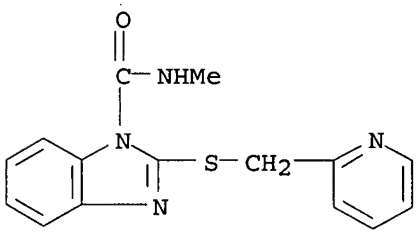
I

AB Pyridylalkylsulfinylbenzimidazoles I (R = H, 4-Me, 5-Et, 5-OMe, 5-OH, 5-Ac, 5-CO2H, 5-CO2Et, 5-Me, 5-Cl, 5-CHMe2, 5-CMe3, 5-Pr, 5-CN, 5-CF3, 4-Cl; R1 = H, Me, Cl; R2 = H, Me, Ac, CO2Me, CONH2, CONHMe, CH2Ac, CH2CO2Et, SO2Me; R3 = H, Me, Et, CHMe2; R4 = H, 5-Me, 3-Me, 5-Et) (27 compds.) were prepared by m-ClC6H4CO2OH oxidation of pyridylalkylthiobenzimidazoles prepared e.g. by treating mercaptobenzimidazoles with 2-(1-chloroalkyl)pyridines. I are gastric acid secretion inhibitors. Thus, I (R-R4 = H) at 1 mg/kg gave 90% inhibition of pentagastrin-induced stomach acid secretion in dogs.

IT 60525-10-2 64948-75-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidation of)

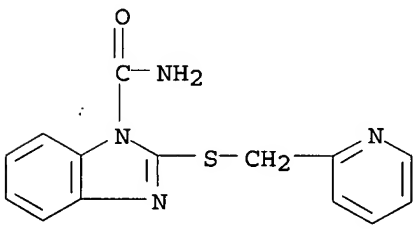
RN 60525-10-2 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



RN 64948-75-0 CAPLUS

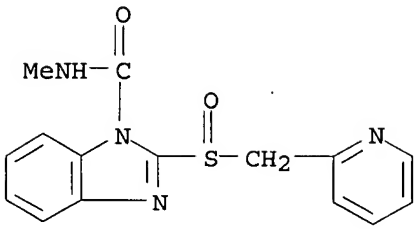
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



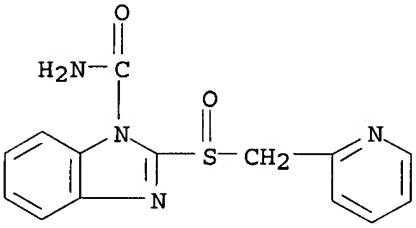
IT 60524-95-0P 60536-43-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 60524-95-0 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)

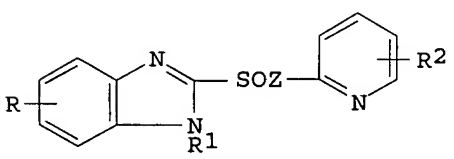


L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:22909 CAPLUS
DOCUMENT NUMBER: 88:22909
TITLE: Benzimidazole derivatives and their salts
INVENTOR(S): Berntsson, Peder Bernhard; Carlsson, Stig Ake Ingemar; Garberg, Lars Erik; Junggren, Ulf Krister; Sjostrand, Sven Erik; Von Wittken Sundell, Gunhild Wika
PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.
SOURCE: Austrian, 10 pp.
CODEN: AUXXAK
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AT 337697	B	19770711	AT 1975-8380	19751104
AT 7508380	A	19761115		
US 4045563	A	19770830	US 1975-630916	19751111
AT 351524	B	19790725	AT 1976-7522	19761011
AT 7607522	A	19790115		

PRIORITY APPLN. INFO.: US 1975-630916 A 19751111
SE 1974-6513 A 19740516
AT 1975-8380 A 19751104

GI



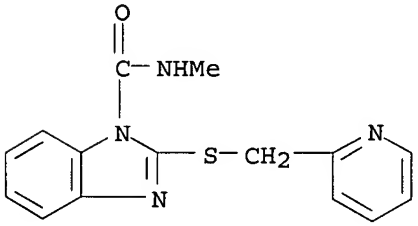
I

AB Pyridylalkylthiobenzimidazoles were oxidized with m-ClC6H4CO3H to give .apprx.30 I (R = H, 4-, 5-Me, 5-OMe, 5-Ac, 5-CO2Et, 5-CMe3, 4-, 6-Cl, 5-CF3, 5-CN, etc.; R1 = H, Me, Ac, CO2Me, CONHMe, SO2Me, etc.; Z = CH2, CHMe, CHEt, CHCHMe2; R2 = H, 3-, 4-, 5-Me, 5-Et, 4-Cl). I in doses of 1-10 mg/kg showed 8-96% inhibition of secretion of stomach acid.

IT 60525-10-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)

RN 60525-10-2 CAPLUS

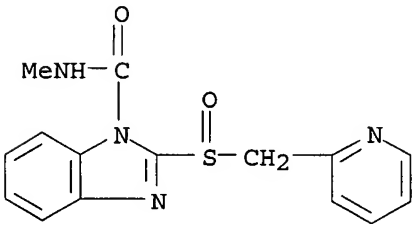
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



IT 60524-95-0P 60536-43-8P 64948-75-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

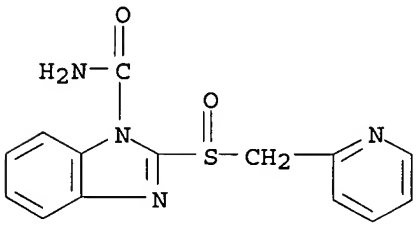
RN 60524-95-0 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



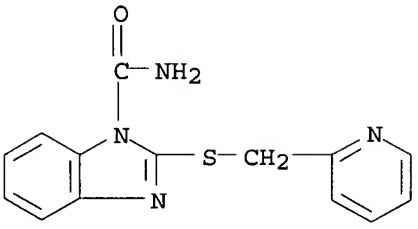
RN 60536-43-8 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 64948-75-0 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)

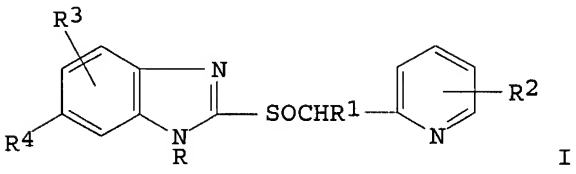


L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:601543 CAPLUS
DOCUMENT NUMBER: 87:201543
TITLE: Substituted 2-[pyridylalkylenesulfinyl]-benzimidazoles with gastric acid secretion inhibiting effects
INVENTOR(S): Berntsson, Peder Bernhard; Carlsson, Stig Ake Ingemar; Garberg, Lars Erik; Junggren, Ulf Krister; Sjostrand, Sven Erik; Von Wittken Sundell, Gunhild Wika
PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4045563	A	19770830	US 1975-630916	19751111
SE 416649	B	19810126	SE 1974-6513	19740516
SE 416649	C	19810507		
DK 140840	B	19791126	DK 1975-3721	19750818
DK 140840	C	19800505		
AU 498140	B2	19790215	AU 1975-86258	19751103
AT 337697	B	19770711	AT 1975-8380	19751104
AT 7508380	A	19761115		
NL 7513141	A	19770512	NL 1975-13141	19751110

PRIORITY APPLN. INFO.: SE 1974-6513 A 19740516
US 1975-630916 A 19751111

GI

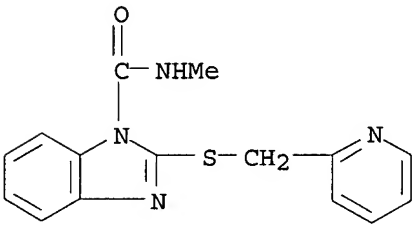


I

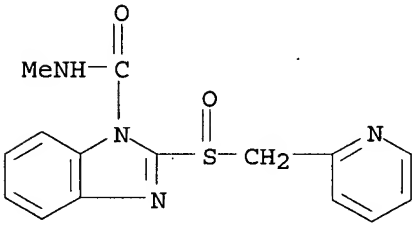
AB Benzimidazoles I (R = H, Me, Ac, CO2Me, CONH2, CONHMe, CH2Ac, CH2CO2Et, SO2Me; R1 = H, Me, Et, CHMe2; R2 = H, 4-Cl, 5-Me, 4-Me, 3-Me, 5-Et; R3 = H, 4-Me, 5-Et, 5-OMe, 5-OH, 5-Ac, 5-CO2H, 5-CO2Et, 5-Me, 5-CMe3, 5-Br, 5-CHMe2, 5-Cl, 5-CF3, 5-CMe3, 5-Pr, 5-CN; R4 = H, Me, Cl) (38 compds.) were prepared e.g. by oxidizing pyridylmethylthiobenzimidazoles. I are gastric acid secretion inhibitors. Thus, I (R-R2 = H, R3 = 4-Me, R4 = ME) at 5 mg/kg orally in dogs caused 94% inhibition on pentagastrin-induced gastric acid secretion.

IT 60525-10-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

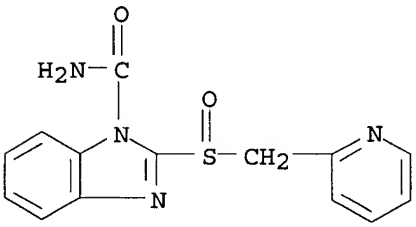
(preparation and oxidation of)
RN 60525-10-2 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



IT 60524-95-0P 60536-43-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 60524-95-0 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)

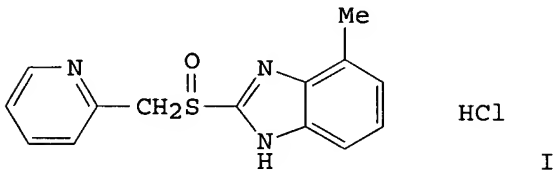


L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:549139 CAPLUS
DOCUMENT NUMBER: 85:149139
TITLE: Agents affecting the secretion of gastric acid
INVENTOR(S): Berntsson, Peder B.; Carlsson, Stig A. I.; Garberg, Lars E.; Junggren, Ulf K.; Sjostrand, Sven E.; Von Wittken Sundell, Gunhild W.
PATENT ASSIGNEE(S): Aktiebolag Hassle, Swed.
SOURCE: Belg., 50 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 834973	A1	19760216	BE 1975-161338	19751029
PRIORITY APPLN. INFO.:			BE 1975-161338 A	19751029

GI



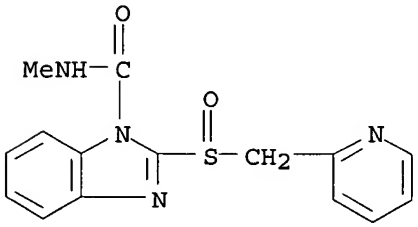
I

AB Gastric secretion-inhibiting compns. comprise substituted 2-sulfinylbenzimidazole. For example, a gastric-secretion-inhibiting sirup was prepared cntg. 2-(2-pyridylmethylsulfinyl)-4-methylbenzimidazole-HCl (I) [60525-03-3] 2.0, saccharin 0.6, sucrose 30.0, glycering 5.0, flavoring agents 0.1 g, EtOH (96%) 10.0 ml, and H2O to 100 ml. The preparation of the title compds. from substituted benzimidoles is described.

IT 60524-95-0P 60536-43-8P
RL: PREP (Preparation)
(preparation of, as gastric secretion inhibitor)

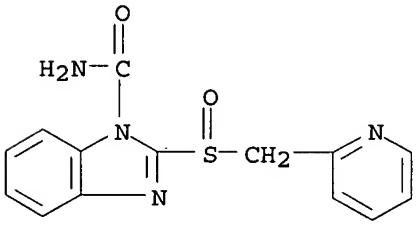
RN 60524-95-0 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 CAPLUS

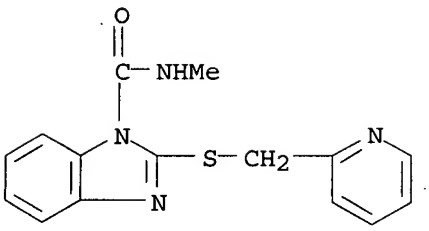
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



IT 60525-10-2
RL: BIOL (Biological study)
(reaction with chlorobenzoic acid)

RN 60525-10-2 CAPLUS

CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



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CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 13:59:14 ON 23 MAY 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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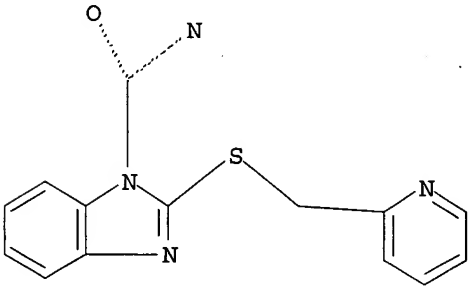
L1 STR



Structure attributes must be viewed using STN Express query preparation.
L3 72 SEA FILE=REGISTRY SSS FUL L1
L5 10 SEA L3

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L5 ANSWER 1 OF 10 USPATFULL on STN

ACCESSION NUMBER:	2006:341588 USPATFULL			
TITLE:	Prodrug and process for producing the same			
INVENTOR(S):	Kamiyama, Keiji, Osaka, JAPAN			
PATENT ASSIGNEE(S):	Takeda Pharmaceuticals North America, Inc., Lincolnshire, IL, UNITED STATES, 60069 (U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006293371	A1	20061228	
APPLICATION INFO.:	US 2003-517847	A1	20030613	(10)
	WO 2003-JP7545		20030613	
			20050624	PCT 371 date
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 2002-175086		20020614	
	JP 2003-41085		20030219	
DOCUMENT TYPE:	Utility			

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TAKEDA PHARMACEUTICALS NORTH AMERICA, INC, INTELLECTUAL PROPERTY DEPARTMENT, ONE TAKEDA PARKWAY, DEERFIELD, IL, 60015, US
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
LINE COUNT: 2309
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a compound having, as a modification group to be eliminated from a prodrug, a group represented by the formula: ##STR1## wherein each symbol is as defined in the specification. According to the present invention, the development of a prodrug based on the modification of a nitrogen-containing heterocycle and the like has become possible.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 635751-21-2P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-22-3P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl trimethylacetate 635751-23-4P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl cyclohexanecarboxylate 635751-24-5P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl benzoate 635751-25-6P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-methoxybenzoate 635751-26-7P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3-chlorobenzoate 635751-27-8P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3,4-difluorobenzoate 635751-28-9P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-trifluoromethoxybenzoate 635751-29-0P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-fluorobenzoate 635751-30-3P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3,4,5-trimethoxybenzoate 635751-31-4P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 2-pyridinecarboxylate 635751-32-5P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl methoxyacetate 635751-33-6P, Ethyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-34-7P, Isopropyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-35-8P, Benzyl 2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-36-9P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydropyran-4-yl carbonate 635751-37-0P, 2-Methoxyethyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-38-1P, 2-[N-Ethyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-39-2P,

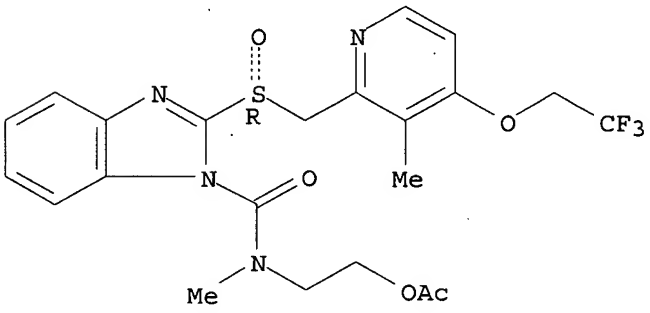
2-[N-Isopropyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-40-5P, Ethyl 2-[N-isopropyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-41-6P, 2-[N-Cyclohexyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-42-7P, 2-[N-Cyclohexyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ethyl carbonate 635751-43-8P, 2-[[[(R)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-45-0P, tert-Butyl [2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]-3-pyridyl]methyl carbonate 635751-46-1P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]benzyl acetate 635751-47-2P 635751-49-4P 635751-50-7P, 2-[[[5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl benzoate 635751-52-9P, 3-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl benzoate 635751-53-0P, Ethyl 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-54-1P, Ethyl 2-[N-methyl[[(S)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-59-6P, 4-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]butyl acetate 635751-60-9P, Ethyl 4-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]butyl carbonate 635751-61-0P, Ethyl 3-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl carbonate 635751-62-1P, 3-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl acetate 635751-63-2P 635751-64-3P 635751-66-5P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-67-6P 635751-68-7P, 3-Methoxypropyl 2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-69-8P 635751-70-1P 635751-71-2P, Ethyl 2-[2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethoxy]ethyl carbonate 635751-72-3P, Ethyl 2-[N-methyl[[2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethoxy]carbonyl]amino]ethyl carbonate 635751-73-4P, Ethyl 2-[[[5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-75-6P, 2-[[[5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-77-8P, Ethyl 2-[[[(S)-5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-79-0P, Ethyl 2-[[[2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-80-3P, 2-[[[2-[[[4-(3-Methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-81-4P,

2-[[[5-(Difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl ethyl carbonate 635751-83-6P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 1-methylpiperidine-4-carboxylate 635751-84-7P 635751-85-8P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 1-methylpiperidin-4-yl carbonate 635751-86-9P 635752-05-5P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl benzoate 635752-06-6P, Isopropyl 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635752-07-7P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydropyran-4-yl carbonate 635752-08-8P, 2-[[[2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate
(antiulcer agent; preparation of prodrugs containing benzimidazoles and analogs
as proton pump inhibitors for treatment of peptic ulcers)

RN 635751-21-2 USPATFULL

CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

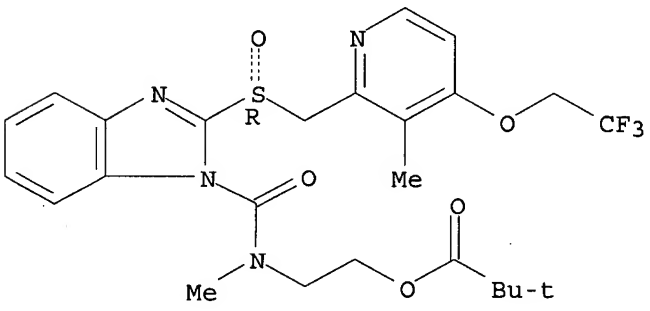
Absolute stereochemistry.



RN 635751-22-3 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

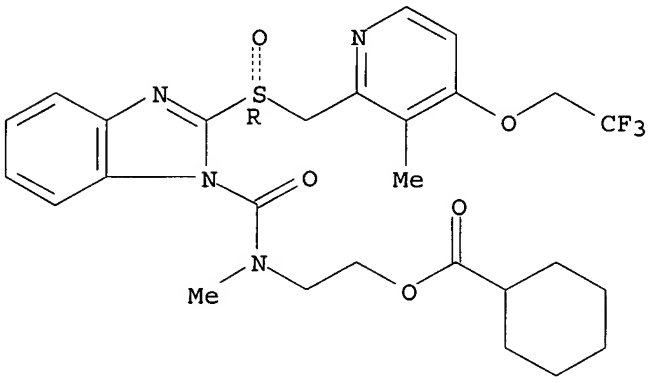
Absolute stereochemistry.



RN 635751-23-4 USPATFULL

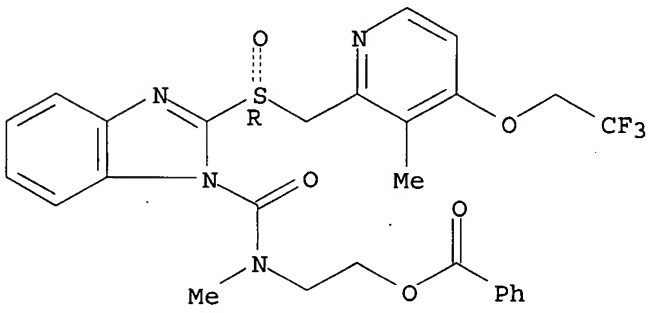
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



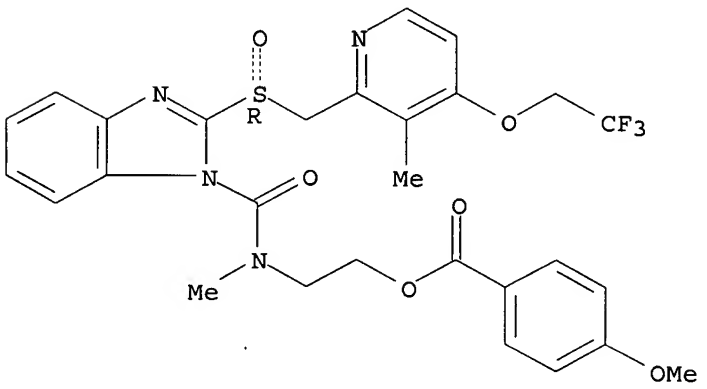
RN 635751-24-5 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

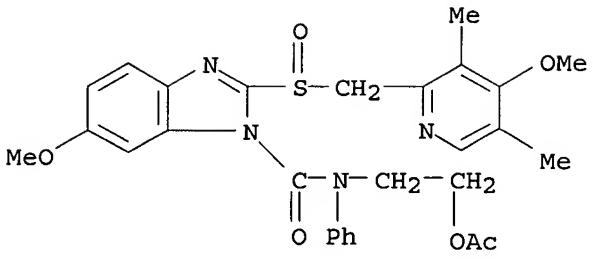
Absolute stereochemistry.



RN 635751-25-6 USPATFULL
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

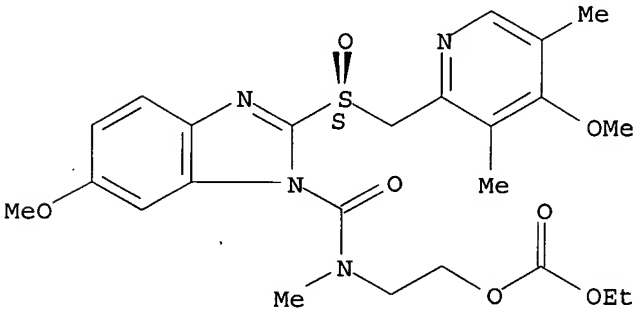
Absolute stereochemistry.



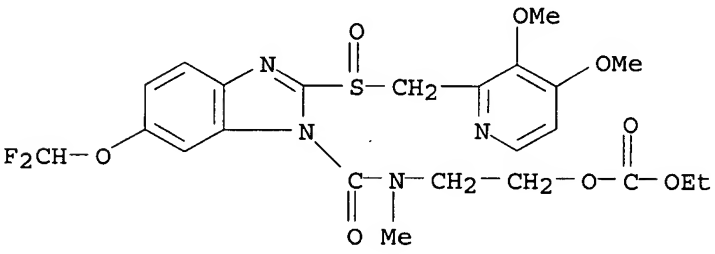


RN 635751-78-9 USPATFULL
CN Carbonic acid, ethyl 2-[[[6-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 635751-82-5 USPATFULL
CN Carbonic acid, 2-[[[6-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2006:208515 USPATFULL
TITLE: Controlled release composition
INVENTOR(S): Nagahara, Naoki, Osaka-shi , Osaka, JAPAN
Miyamoto, Keiko, Osaka-shi, Osaka, JAPAN
Akiyama, Yohko, Osaka-shi, Osaka, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006177509	A1	20060810	
APPLICATION INFO.:	US 2004-549150	A1	20040316	(10)
	WO 2004-JP3483		20040316	
			20050915	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-72858	20030317

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 7210
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a controlled release composition showing release of an active ingredient (proton pump inhibitor) controlled in two or more steps at different release rates, which contains 1) a release-controlled part A capable of controlling release of the active ingredient to occur at a predetermined rate, 2) a release-controlled part B capable of controlling release of the active ingredient to occur at a predetermined rate lower than the release rate of the release-controlled part A, and where necessary, 3) a release-controlled part C capable of controlling release of the active ingredient to occur at a predetermined rate faster than the release rate of the release-controlled part B, wherein the release of the active ingredient from the release-controlled part B precedes the release of the active ingredient from the release-controlled part A (when release-controlled part C is contained, the release of the active ingredient from the release-controlled part C precedes the release of the active ingredient from the release-controlled part B).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 635751-21-2P 635751-22-3P 635751-23-4P
635751-24-5P 635751-25-6P 635751-26-7P
635751-27-8P 635751-28-9P 635751-29-0P
635751-30-3P 635751-31-4P 635751-32-5P
635751-33-6P 635751-34-7P 635751-35-8P
635751-36-9P 635751-37-0P 635751-38-1P
635751-39-2P 635751-40-5P 635751-41-6P
635751-42-7P 635751-43-8P 635751-46-1P
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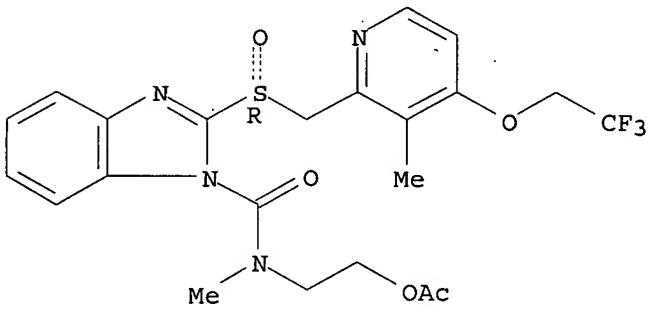
635751-62-1P 635751-63-2P 635751-64-3P
635751-66-5P 635751-67-6P 635751-68-7P
635751-69-8P 635751-70-1P 635751-71-2P
635751-72-3P 635751-73-4P, Ethyl 2-[[[5-methoxy-2-[[(4-methoxy3,5-dimethyl-2-pyridyl)methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-75-6P, 2-[[[5-Methoxy-2-[[(4-methoxy3,5-dimethyl-2-pyridyl)methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-77-8P 635751-79-0P, Ethyl 2-[[[2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-80-3P, 2-[[[2-[[[4-(3-Methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-81-4P, 2-[[[5-(Difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl ethyl carbonate 635751-83-6P 635751-84-7P 635751-85-8P 635751-86-9P 635752-05-5P 635752-06-6P 635752-07-7P 635752-08-8P, 2-[[[2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 765942-20-9P

(preparation of proton pump inhibitors for controlled-release compns.)

RN 635751-21-2 USPATFULL

CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

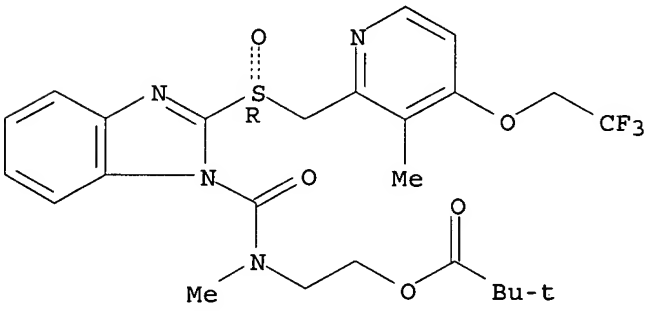
Absolute stereochemistry.



RN 635751-22-3 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

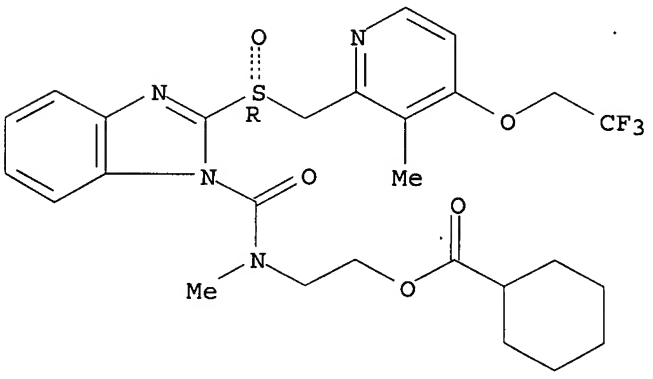
Absolute stereochemistry.



RN 635751-23-4 USPATFULL

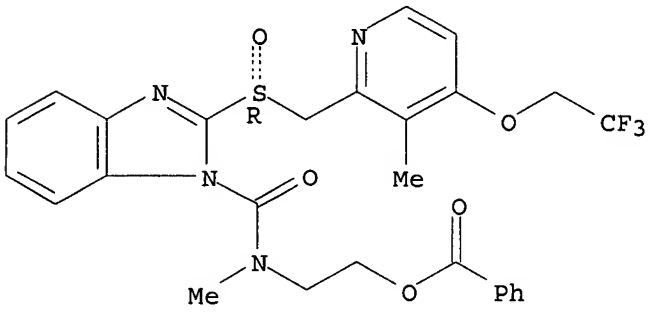
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



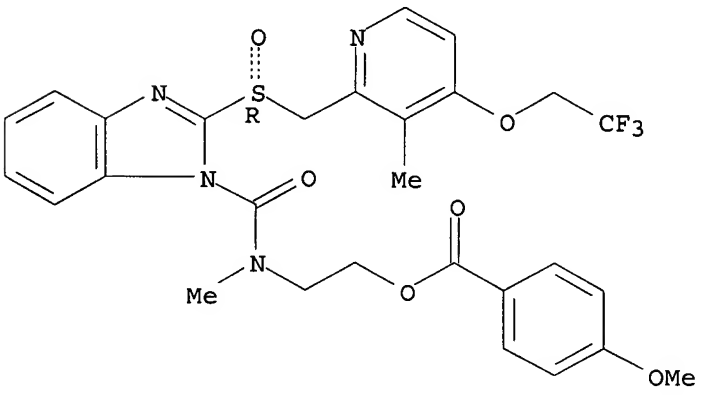
RN 635751-24-5 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



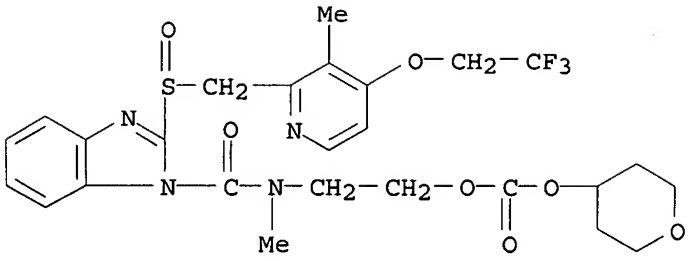
RN 635751-25-6 USPATFULL
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

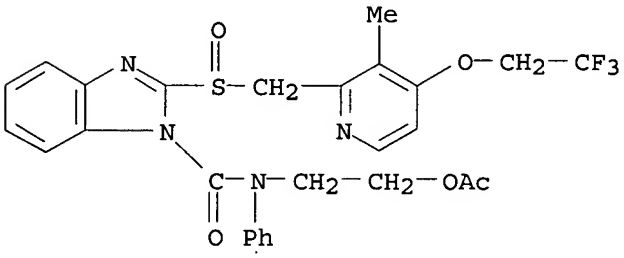


RN 635751-26-7 USPATFULL
CN Benzoic acid, 3-chloro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

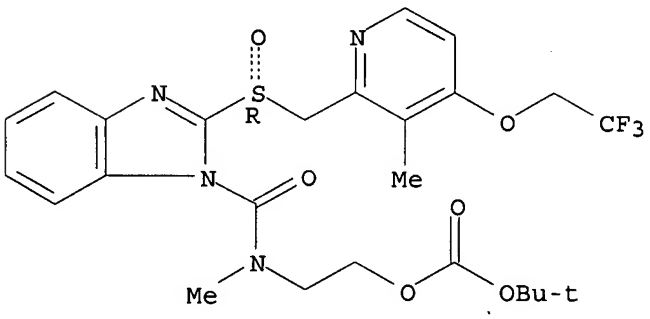


RN 635752-08-8 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-N-phenyl- (9CI) (CA INDEX NAME)



RN 765942-20-9 USPATFULL
CN Carbonic acid, 1,1-dimethylethyl 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 3 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2006:188325 USPATFULL
TITLE: Drug composition having active ingredient adhered at high concentration to spherical core
INVENTOR(S): Yoneyama, Shuji, Osaka-shi, JAPAN
Bando, Hiroto, Osaka-shi, JAPAN
PATENT ASSIGNEE(S): Aoyama & Partners (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006159760	A1	20060720	
APPLICATION INFO.:	US 2004-548504	A1	20040310	(10)
	WO 2004-JP3075		20040310	

20050909 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-66344	20030312

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 6689
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Granule, fine particle or tablet of excellent leaching property, comprising a drug active ingredient in high content realized by forming a layer containing drug active ingredient on core particles through a combination of a method of dispersing and adhering an active ingredient while spraying or adding a binder with a method of spraying or adding a solution or suspension wherein an active ingredient and a binder are contained so as to effect adhesion. Further, there are provided a drug composition containing such a granule, fine particle or tablet and a process for producing the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 635751-21-2P 635751-22-3P 635751-23-4P
635751-24-5P 635751-25-6P 635751-26-7P
635751-27-8P 635751-28-9P 635751-29-0P
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635751-33-6P 635751-34-7P 635751-35-8P
635751-36-9P 635751-37-0P 635751-38-1P
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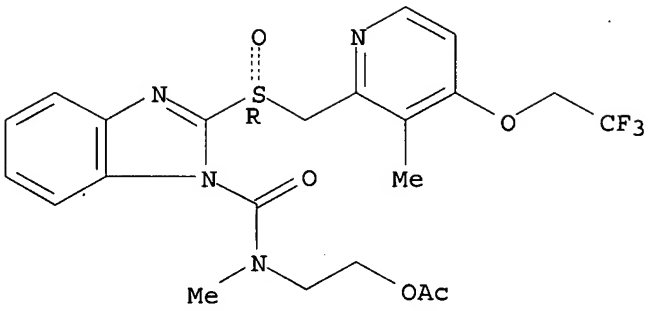
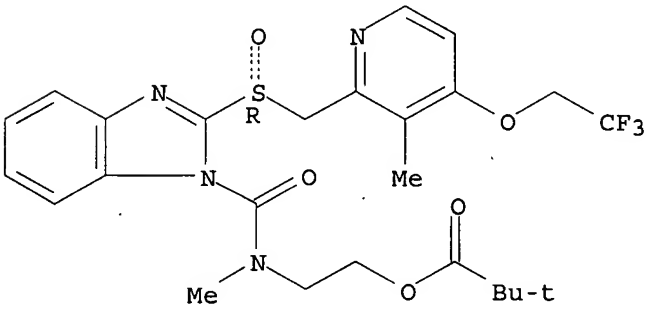
635751-79-0P 635751-80-3P 635751-81-4P
635751-83-6P 635751-84-7P 635751-85-8P
635751-86-9P 635752-05-5P 635752-06-6P
635752-07-7P 635752-08-8P
(preparation of drug composition containing proton pump inhibitors adhered at high
concentration to spherical core)
RN 635751-21-2 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



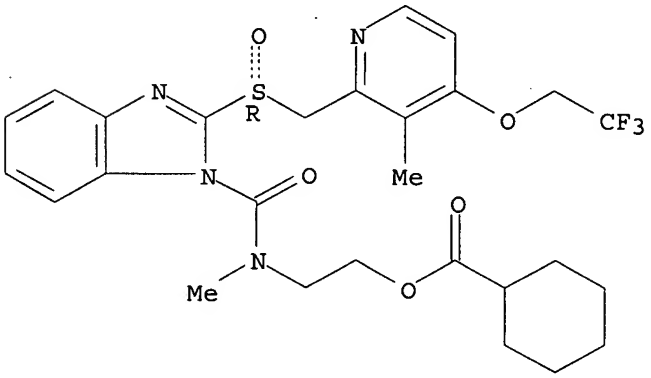
RN 635751-22-3 USPATFULL
CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



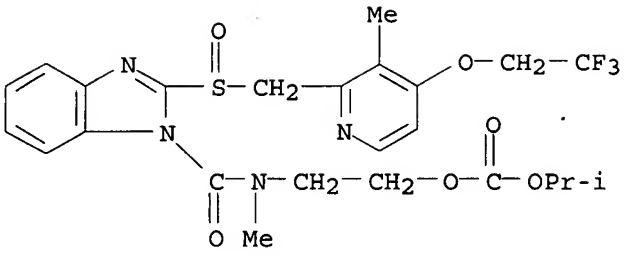
RN 635751-23-4 USPATFULL
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

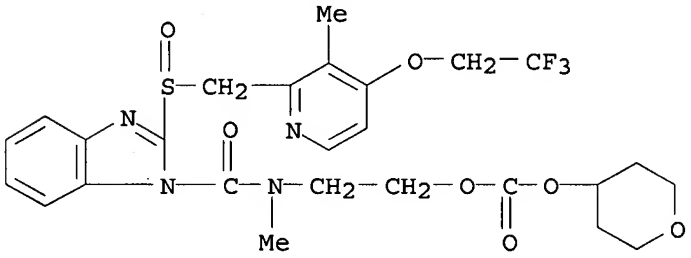


RN 635751-24-5 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

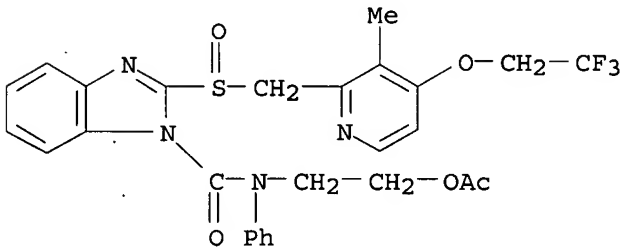
Absolute stereochemistry.



RN 635752-07-7 USPATFULL
CN Carbonic acid, 2-[methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)



RN 635752-08-8 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-N-phenyl- (9CI) (CA INDEX NAME)



L5 ANSWER 4 OF 10 USPATFULL on STN
ACCESSION NUMBER: 2006:15490 USPATFULL
TITLE: Controlled release preparation
INVENTOR(S): Akiyama, Yohko, Osaka-shi Osaka, JAPAN
Kurasawa, Takashi, Osaka-shi Osaka, JAPAN
Bando, Hiroto, Osaka-shi Osaka, JAPAN
Nagahara, Naoki, Osaka-shi Osaka, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006013868	A1	20060119	
APPLICATION INFO.:	US 2003-531069	A1	20031015	(10)
	WO 2003-JP13155		20031015	
			20050411	PCT 371 date

	NUMBER	DATE

PRIORITY INFORMATION:	JP 2002-301876	20021016
	JP 2003-66336	20030312
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Mark Chao, Takeda Pharmaceuticals North America Inc, Intellectual Property Department, 475 Half Day Road Suite 500, Lincolnshire, IL, 60069, US	
NUMBER OF CLAIMS:	49	
EXEMPLARY CLAIM:	1	
LINE COUNT:	7380	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A controlled release preparation wherein the release of active ingredient is controlled, which releases an active ingredient for an extended period of time by staying or slowly migrating in the gastrointestinal tract, is provided by means such as capsulating a tablet, granule or fine granule wherein the release of active ingredient is controlled and a gel-forming polymer. Said tablet, granule or fine granule has a release-controlled coating-layer formed on a core particle containing an active ingredient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 635751-21-2P 635751-22-3P 635751-23-4P
635751-24-5P 635751-25-6P 635751-26-7P
635751-27-8P 635751-28-9P 635751-29-0P
635751-30-3P 635751-31-4P 635751-32-5P
635751-33-6P 635751-34-7P 635751-35-8P
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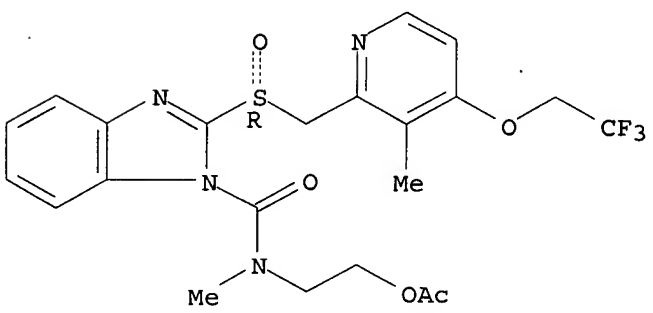
635751-75-6P 635751-77-8P 635751-79-0P
635751-80-3P 635751-81-4P 635751-83-6P
635751-84-7P 635751-85-8P 635751-86-9P
635752-05-5P 635752-06-6P 635752-07-7P
635752-08-8P
(controlled release preparation containing proton pump inhibitors)

RN 635751-21-2 USPATFULL

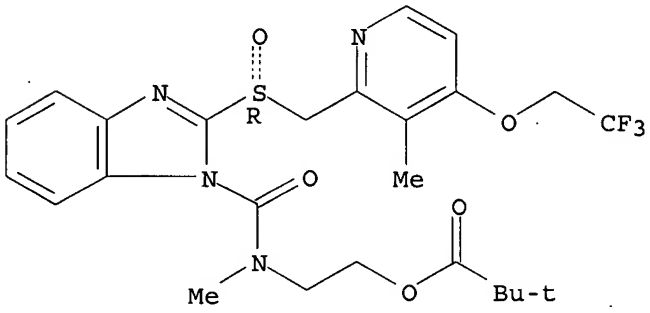
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



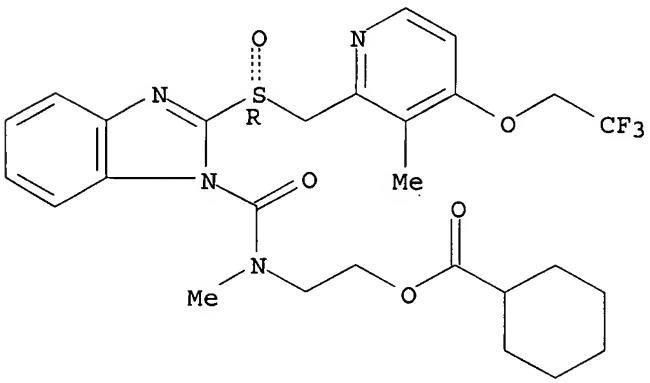
RN 635751-22-3 USPATFULL
CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



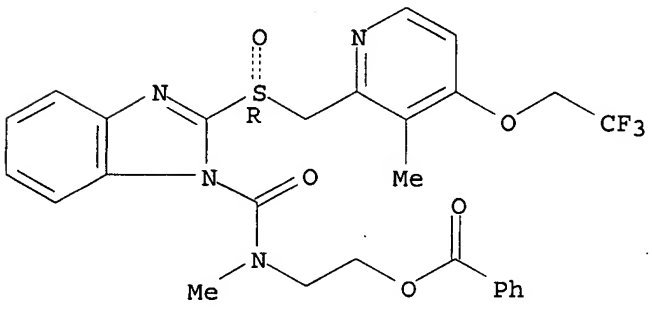
RN 635751-23-4 USPATFULL
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

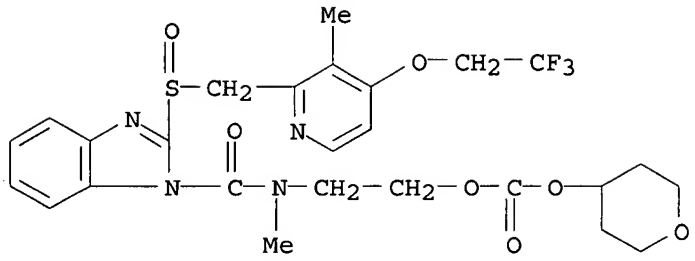


RN 635751-24-5 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

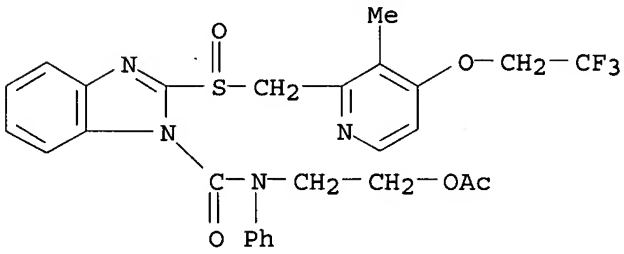
Absolute stereochemistry.



RN 635751-25-6 USPATFULL



RN 635752-08-8 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-N-phenyl- (9CI) (CA INDEX NAME)



L5 ANSWER 5 OF 10 USPATFULL on STN

ACCESSION NUMBER:	2005:255712 USPATFULL			
TITLE:	Prodrugs of imidazole derivatives, for use as proton pump inhibitors in the treatment of e.g. peptic ulcers			
INVENTOR(S):	Kamiyama, Keiji, Ibaraki-shi, JAPAN Banno, Hiroshi, Kawanishi-shi, JAPAN Sato, Fumihiko, Suita-shi, JAPAN			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005222210	A1	20051006	
APPLICATION INFO.:	US 2003-517633	A1	20030613	(10)
	WO 2003-JP7546		20030613	
			20041213	PCT 371 date
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 2002-175086		20020614	
	JP 2003-200241085		20030219	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US			
NUMBER OF CLAIMS:	24			
EXEMPLARY CLAIM:	1			
LINE COUNT:	5425			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An imidazole compound represented by the formula (I), a salt thereof and a compound of the formula (V), which is one of the intermediates thereof. wherein each symbol is as defined in the present specification. The compound of the present invention shows a superior anti-ulcer activity, a gastric acid secretion inhibitory action, a mucosa-protecting action, an anti-Helicobacter pylori action and the

like. Since it shows low toxicity, the compound is useful as a pharmaceutical product. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 635751-21-2P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-22-3P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl trimethylacetate 635751-23-4P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl cyclohexanecarboxylate 635751-24-5P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl benzoate 635751-25-6P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-methoxybenzoate 635751-26-7P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3-chlorobenzoate 635751-27-8P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3,4-difluorobenzoate 635751-28-9P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-trifluoromethoxybenzoate 635751-29-0P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 4-fluorobenzoate 635751-30-3P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 3,4,5-trimethoxybenzoate 635751-31-4P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 2-pyridinecarboxylate 635751-32-5P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl methoxyacetate 635751-33-6P, Ethyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-34-7P, Isopropyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-35-8P, Benzyl 2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-36-9P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydropyran-4-yl carbonate 635751-37-0P, 2-Methoxyethyl 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-38-1P, 2-[N-Ethyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-39-2P, 2-[N-Isopropyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-40-5P, Ethyl 2-[N-isopropyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-41-6P, 2-[N-Cyclohexyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-42-7P, 2-[N-Cyclohexyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ethyl carbonate 635751-43-8P, 2-[[[(R)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethy

l acetate 635751-45-0P, tert-Butyl [2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]-3-pyridyl]methyl carbonate 635751-46-1P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]benzyl acetate 635751-47-2P 635751-49-4P 635751-50-7P, 2-[[[5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl benzoate 635751-52-9P, 3-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl benzoate 635751-53-0P, Ethyl 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-54-1P, Ethyl 2-[N-methyl[[(S)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-59-6P, 4-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]butyl acetate 635751-60-9P, Ethyl 4-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]butyl carbonate 635751-61-0P, Ethyl 3-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl carbonate 635751-62-1P, 3-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]propyl acetate 635751-63-2P 635751-64-3P 635751-66-5P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl acetate 635751-67-6P 635751-68-7P, 3-Methoxypropyl 2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635751-69-8P 635751-70-1P 635751-71-2P, Ethyl 2-[2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethoxy]ethyl carbonate 635751-72-3P, Ethyl 2-[N-methyl[[2-[N-methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethoxy]carbonyl]amino]ethyl carbonate 635751-73-4P, Ethyl 2-[[[5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-75-6P, 2-[[[5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-77-8P, Ethyl 2-[[[(S)-5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-79-0P, Ethyl 2-[[[2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl carbonate 635751-80-3P, 2-[[[2-[[[4-(3-Methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate 635751-81-4P, 2-[[[5-(Difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](methyl)amino]ethyl ethyl carbonate 635751-83-6P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 1-methylpiperidine-4-carboxylate 635751-84-7P 635751-85-8P, 2-[N-Methyl[[(R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl 1-methylpiperidin-4-yl carbonate 635751-86-9P 635752-05-5P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl benzoate 635752-06-6P, Isopropyl 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-

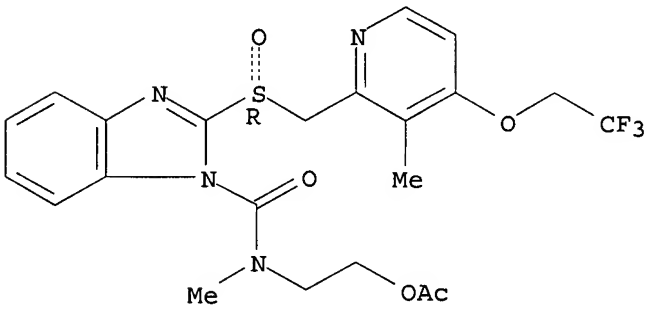
pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl carbonate 635752-07-7P, 2-[N-Methyl[[2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl tetrahydropyran-4-yl carbonate 635752-08-8P, 2-[[[2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl](phenyl)amino]ethyl acetate

(antiulcer agent; preparation of prodrugs containing benzimidazoles and analogs as proton pump inhibitors for treatment of peptic ulcers)

RN 635751-21-2 USPATFULL

CN 1H-Benzimidazole-1-carboxamide, N-[2-(acetyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

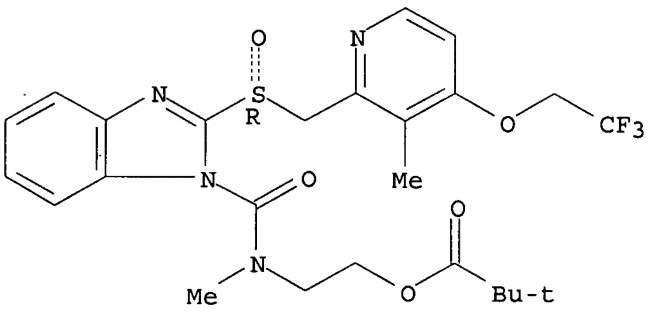
Absolute stereochemistry.



RN 635751-22-3 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

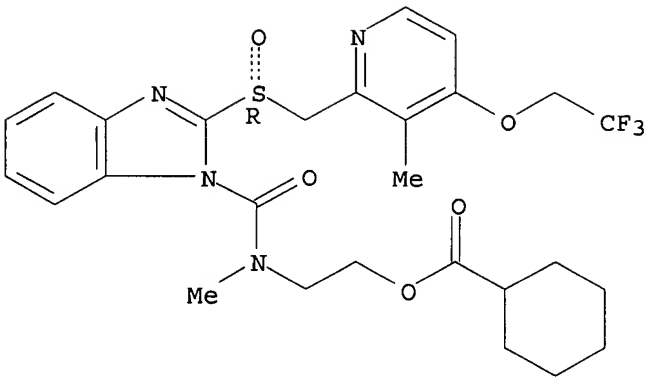
Absolute stereochemistry.



RN 635751-23-4 USPATFULL

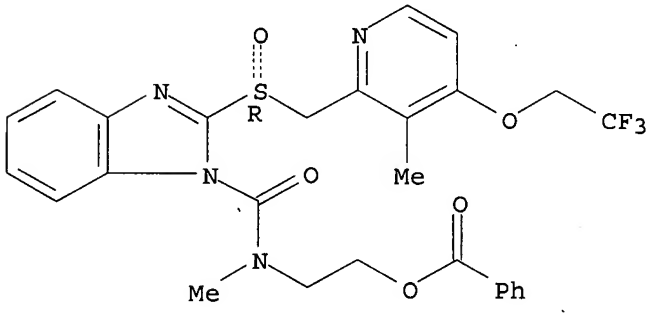
CN Cyclohexanecarboxylic acid, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



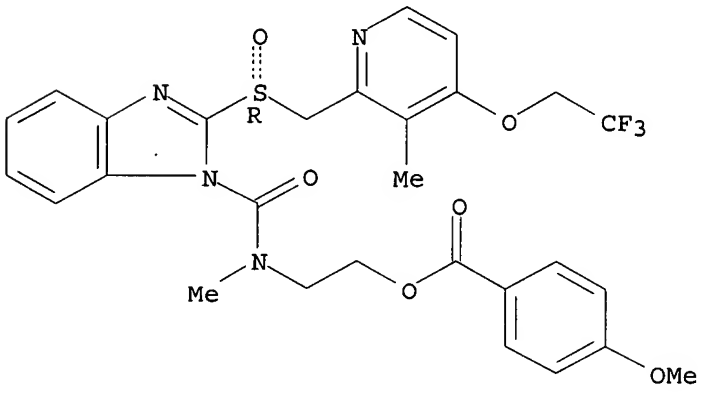
RN 635751-24-5 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-[2-(benzoyloxy)ethyl]-N-methyl-2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



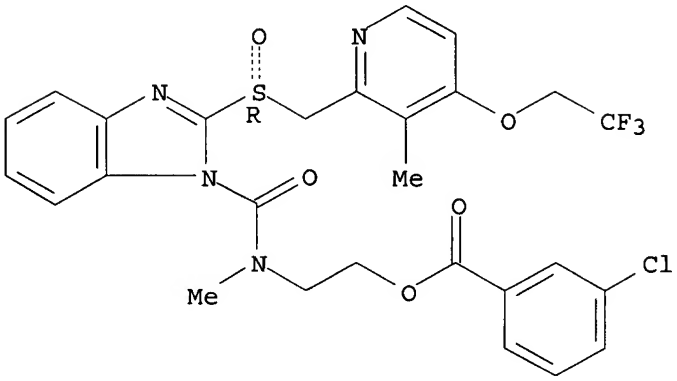
RN 635751-25-6 USPATFULL
CN Benzoic acid, 4-methoxy-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



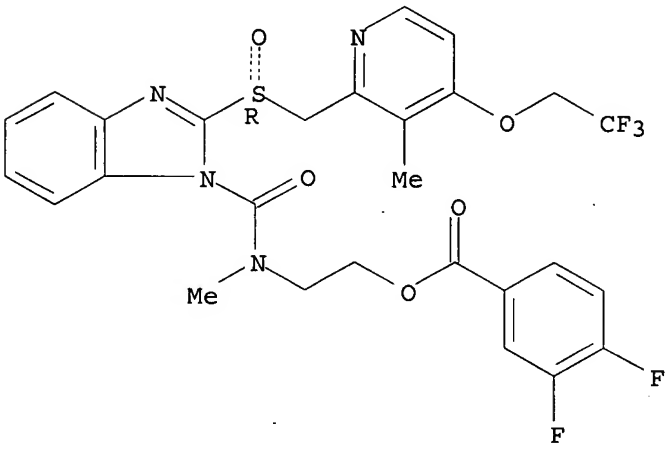
RN 635751-26-7 USPATFULL
CN Benzoic acid, 3-chloro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



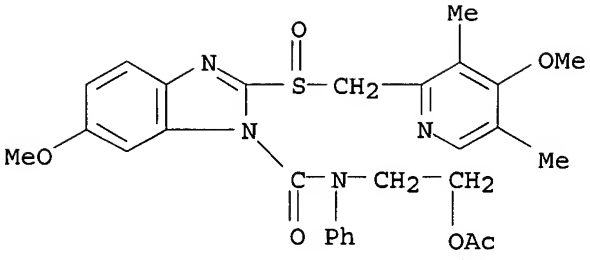
RN 635751-27-8 USPATFULL
CN Benzoic acid, 3,4-difluoro-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



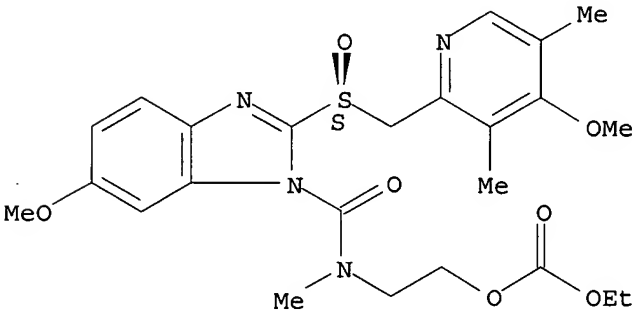
RN 635751-28-9 USPATFULL
CN Benzoic acid, 4-(trifluoromethoxy)-, 2-[methyl[[2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

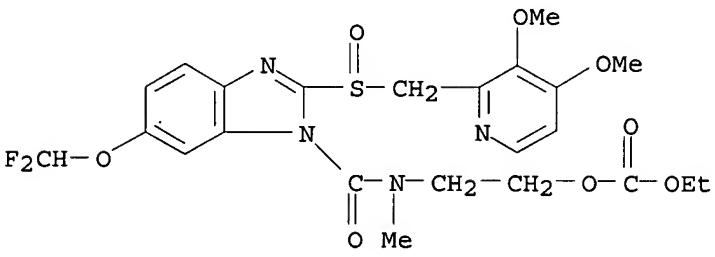


RN 635751-78-9 USPATFULL
CN Carbonic acid, ethyl 2-[[[6-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 635751-82-5 USPATFULL
CN Carbonic acid, 2-[[[6-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazol-1-yl]carbonyl]methylamino]ethyl ethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 6 OF 10 USPATFULL on STN
ACCESSION NUMBER: 97:27168 USPATFULL
TITLE: Pharmaceutical use of pyridine compounds
INVENTOR(S): Kawakita, Takeshi, Chikujo-gun, Japan
Sano, Mitsuharu, Chikujo-gun, Japan
Yutoku, Yuko, Chikujo-gun, Japan
Ikeda, Yoshifumi, Chikujo-gun, Japan
Haga, Keiichiro, Chikujo-gun, Japan
PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd., Japan
(non-U.S. corporation)

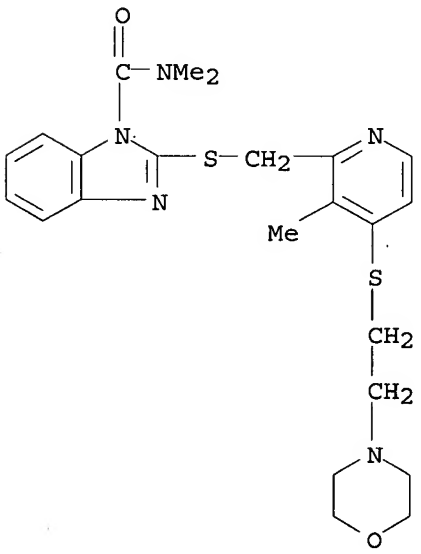
NUMBER	KIND	DATE

PATENT INFORMATION: US 5616581 19970401
APPLICATION INFO.: US 1995-460666 19950602 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1994-352183, filed on 1 Dec 1994, now patented, Pat. No. US 5504082

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1992-167017	19920601
	JP 1993-272494	19931029

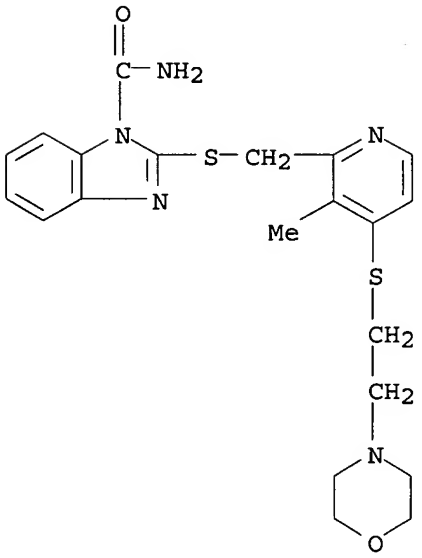
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ramsuer, Robert W.
LEGAL REPRESENTATIVE: Wenderoth, Lind & Ponack
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 2572
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pyridine compound of the formula ##STR1## wherein R.sup.1 is a hydrogen, a halogen, an alkyl, an alkoxy or the like, R.sup.2 and R.sup.3 are each a hydrogen, a halogen or an alkyl, --P.dbd.Q-- is --CH.dbd.CH--, --N.dbd.CH-- or --CH.dbd.N--, A is an oxygen atom, a sulfur atom or N(R.sup.4) wherein R.sup.4 is hydrogen, alkyl or the like, n is 0, 1 or 2, B is S(O)p wherein p is 0, 1 or 2, D is a single bond, an alkylene or the like and E is an alkoxyalkyl or --N(R.sup.6)(R.sup.7), and a pharmaceutically acceptable salt thereof have antibacterial activity against Helicobacter pylori, antiulcer activity, gastrointestinal cytoprotective activity, ulcer recurrence, relapse-preventive activity and gastric acid secretion-suppressive activity and are useful as pharmaceutical preparations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 153284-60-7P 153284-62-9P
(preparation of, as ulcer inhibitor and antibacterial agent against Helicobacter pylori)
RN 153284-60-7 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N,N-dimethyl-2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)



RN 153284-62-9 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, 2-[[[3-methyl-4-[[2-(4-

morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)



L5 ANSWER 7 OF 10 USPATFULL on STN

ACCESSION NUMBER:	96:27193 USPATFULL
TITLE:	Pyridine compound and pharmaceutical compostions
INVENTOR(S):	Kawakita, Takeshi, Fukuoka, Japan Sano, Mitsuharu, Fukuoka, Japan Yutoku, Yuko, Fukuoka, Japan Ikeda, Yoshifumi, Fukuoka, Japan Haga, Keiichiro, Fukuoka, Japan
PATENT ASSIGNEE(S):	Yoshitomi Pharmaceutical Industries, Ltd., Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5504082		19960402	
APPLICATION INFO.:	US 1994-352183		19941201	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1992-167017	19920601
	JP 1993-272494	19931029

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Ramsuer, Robert W.
LEGAL REPRESENTATIVE:	Wenderoth, Lind & Ponack
NUMBER OF CLAIMS:	10
EXEMPLARY CLAIM:	1
LINE COUNT:	2587

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A pyridine compound of the formula ##STR1## wherein R.sup.1 is a hydrogen, a halogen, an alkyl, an alkoxy or the like, R.sup.2 and R.sup.3 are each a hydrogen, a halogen or an alkyl, --P.dbd.Q-- is --CH.dbd.CH--, --N.dbd.CH-- or --CH.dbd.N--, A is an oxygen atom, a sulfur atom or N(R.sup.4) wherein R.sup.4 is hydrogen, alkyl or the like, n is 0, 1 or 2, B is S(O)p wherein p is 0, 1 or 2, D is a single bond, an alkylene or the like and E is an alkoxyalkyl or --N(R.sup.6)(R.sup.7), and a pharmaceutically acceptable salt thereof have antibacterial activity against Helicobater pylori, antiulcer

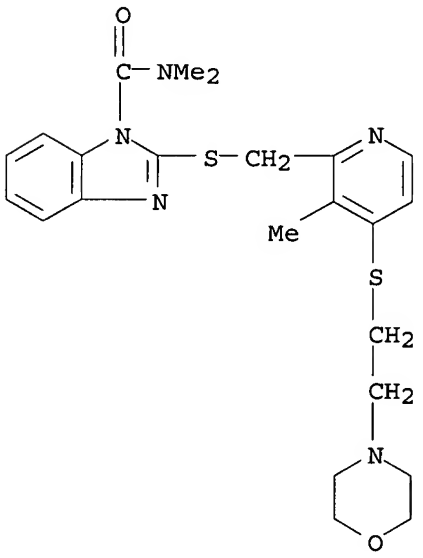
activity, gastrointestinal cytoprotective activity, ulcer recurrence, relapse-preventive activity and gastric acid secretion-suppressive activity and are useful as pharmaceutical preparations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 153284-60-7P 153284-62-9P
(preparation of, as ulcer inhibitor and antibacterial agent against Helicobacter pylori)

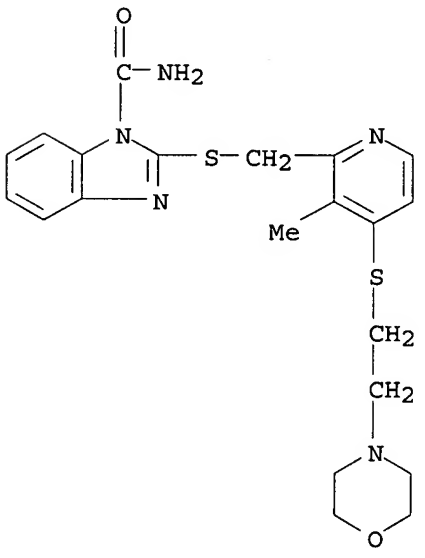
RN 153284-60-7 USPATFULL

CN 1H-Benzimidazole-1-carboxamide, N,N-dimethyl-2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)



RN 153284-62-9 USPATFULL

CN 1H-Benzimidazole-1-carboxamide, 2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 10 USPATFULL on STN
ACCESSION NUMBER: 91:64959 USPATFULL
TITLE: Novel pharmacologically active compound pyridyl methylsulfinyl benzimidazole
INVENTOR(S): Brandstram, Arne E., Goteborg, Sweden
Carlsson, Stig A. I., Molnlycke, Sweden
Kallsson, Britt I. M., Molndal, Sweden
Lindberg, Per L., Askim, Sweden
PATENT ASSIGNEE(S): AB Hassle, Molndal, Sweden (non-U.S. corporation)

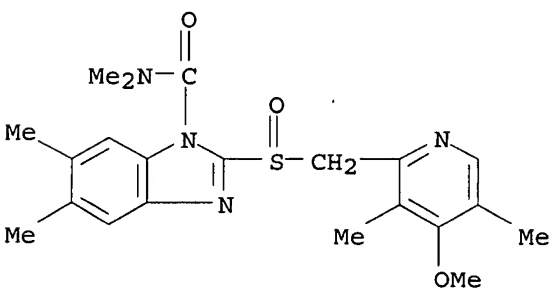
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5039806		19910813
APPLICATION INFO.:	US 1989-408719		19890918 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1989-379703, filed on 12 Jul 1989, now abandoned which is a continuation of Ser. No. US 1988-266330, filed on 1 Nov 1988, now abandoned which is a continuation of Ser. No. US 1987-21992, filed on 5 Mar 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-884863, filed on 16 Jul 1986, now abandoned which is a continuation of Ser. No. US 1984-578418, filed on 9 Feb 1984, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1983-7369	19830211

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fan, Jane T.
LEGAL REPRESENTATIVE: White & Case
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
LINE COUNT: 1942
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel compounds of the formula ##STR1## pharmaceutical compositions containing such compounds as active ingredient, and the use of the compounds in medicine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 92894-17-2P
(preparation and stomach antisecretory activity of)
RN 92894-17-2 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, 2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-N,N,5,6-tetramethyl- (9CI) (CA INDEX NAME)



L5 ANSWER 9 OF 10 USPATFULL on STN
ACCESSION NUMBER: 82:55664 USPATFULL
TITLE: Methods for treating gastrointestinal inflammation

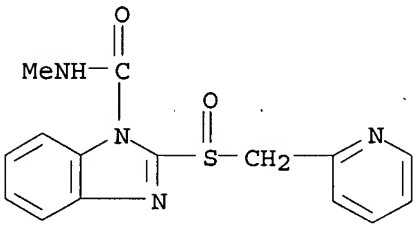
10/517,633

INVENTOR(S): Ruwart, Mary J., Kalamazoo, MI, United States
PATENT ASSIGNEE(S): The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)

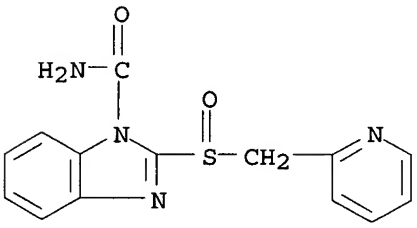
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4359465		19821116
APPLICATION INFO.:	US 1980-173233		19800728 (6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rosen, Sam
LEGAL REPRESENTATIVE: Hattan, L. R.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1,2
LINE COUNT: 1253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the novel cytoprotective use for known heterocyclyalkylsulfinylbenzimidazoles, and novel, substantially non-antisecretory unit dose pharmaceutical compositions thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 60524-95-0 60536-43-8
(gastrointestinal inflammation inhibitor)
RN 60524-95-0 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 10 OF 10 USPATFULL on STN
ACCESSION NUMBER: 77:46665 USPATFULL
TITLE: Substituted 2-[pyridylalkylenesulfinyl]-benzimidazoles with gastric acid secretion inhibiting effects
INVENTOR(S): Berntsson, Peder Bernhard, Molndal, Sweden
Carlsson, Stig Ake Ingemar, Molnlycke, Sweden
Garberg, Lars Erik, Molnlycke, Sweden
Junggren, Ulf Krister, Pixbo, Sweden
Sjostrand, Sven Erik, Kungsbacka, Sweden

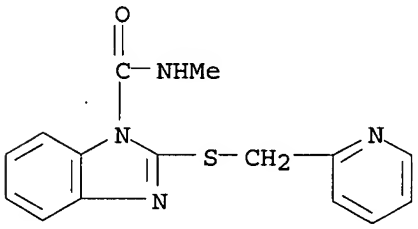
	VON Wittken Sundell, Gunhild Wika, Askim, Sweden
PATENT ASSIGNEE(S):	AB Hassle, Goteborg, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4045563		19770830
APPLICATION INFO.:	US 1975-630916		19751111 (5)

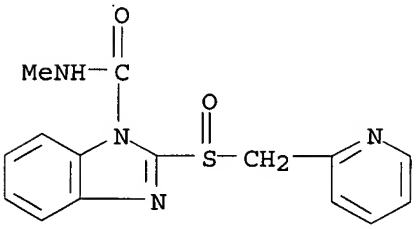
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rotman, Alan L.
LEGAL REPRESENTATIVE: Brumbaugh, Graves, Donohue & Raymond
NUMBER OF CLAIMS: 65
EXEMPLARY CLAIM: 1,7
LINE COUNT: 1104
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds having the structural formula ##STR1## PHARMACEUTICAL COMPOSITIONS CONTAINING THE SAME, AND THE USE THEREOF FOR AFFECTING GASTRIC ACID SECRETION; INTERMEDIATE PRODUCTS HAVING THE STRUCTURAL FORMULA ##STR2## AND METHODS FOR PREPARING THE SAME.

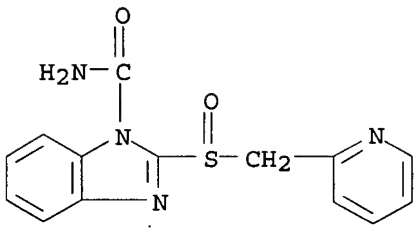
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 60525-10-2P
(preparation and oxidation of)
RN 60525-10-2 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)thio]- (9CI) (CA INDEX NAME)



IT 60524-95-0P 60536-43-8P
(preparation of)
RN 60524-95-0 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, N-methyl-2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



RN 60536-43-8 USPATFULL
CN 1H-Benzimidazole-1-carboxamide, 2-[(2-pyridinylmethyl)sulfinyl]- (9CI) (CA INDEX NAME)



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